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westsat's SATELLITE CHANNEL CHART®

The Official Master Reference for all North American C & KU Band satellite programming services.
VIDEO • SUBCARRIER, SCPC and DATS/SEDATS AUDIO

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Compiled and Updated through September 15, 1996

WESTSAT COMMUNICATIONS

THE TRANSPONDER HOTLINE
SATFACTS/CHANNEL CHANGES

Snap, crackle - - - hatch? Say What? Guess again, but that familiar old sound can mean only one thing - it's time to check the official birth notices in the local satellite dailies, and find which new birds have just been born, only to fly away from their nests, and join their compatriots in that great telecommunications aviary-in-the-sky. Launching most recently out of Cape Canaveral on **9-8-96** at 5:49pmET, is **GE Americom's** 1st C/Ku-Band hybrid spacecraft, **GE-1**, riding aboard a Lockeed Martin Atlas Centaur IIAS vehicle. Successful, but long-awaited liftoff, followed several postponed launch dates, raising some anticipation throughout the industry. Satellite is now anchored at its final destination of **103°W**, where it has just finished up, and passed muster on all in-orbit TT&C and transponder sweep tests. The Lockheed Martin-built GE-1 sports **24 C-Band transponders** with variable power from **16-18 watts** and **24 Ku-Band transponders** at **60 watts** each. Note of interest is that GE-1 is first hybrid bird to provide an equal number of C-to-Ku-Band channels, all at **36 mhz bandwidth** (Ku & C-Band transponder/frequency charts for GE-1 have been included in this issue on pages 49 & 50, respectively). While at 103°W, new satellite will briefly co-locate with GE's tiring Ku-Band bird, **GSTAR 1**. Inherited from GTE Spacenet after GE's buyout of the company several years ago, GSTAR 1 will be retired soon after all current satellite customers have migrated their traffic to the new GE-1 and other spacecraft. Included are **Federal Express**, **Qualcomm** and **Starnet**, with moves starting **9-28-96**. In addition to these GSTAR transferees, **NBC-TV** is taking **8** Ku-Band transponders for its 8 feeds that will be ultimately be moved over from GE SATCOM K2 at 81°W. Also making the switch to GE-1 from K2, are long-time residents **CYCLESAT** and **CHINESE COMMUNICATIONS CHANNEL**. And rounding out initial roster of GE-1 Ku users is **MICROSPACE**, also acquiring a single transponder. Incidentally, current estimated **end-of-life** for **SATCOM K2** is **February 1997**. Meanwhile, **C-Band** side of GE-1 expected to be fired up around **9-15-96** with the following customers/programmers taking berths aboard the new satellite: **SPORTSCHANNEL CHICAGO**, **SPORTSCHANNEL NEW ENGLAND**, **SPORTSCHANNEL OHIO**, **SPORTSCHANNEL PACIFIC**, **SPORTSOUTH**, **HERO COMMUNICATIONS**, **CORNERSTONE TV**, **UNIVISION**, **PRIMETIME 24** (3 tr's) and **5DTV** (2 tr's). . .two days later at 8:04pmET, on **9-10-96**, **Echostar Communications'** 2nd DBS satellite, **ECHOSTAR II**, was successfully launched via an Ariane 42P out of Kourou, French Guiana. Bird was to settle in at **119°W** and co-locate with sister satellite **ECHOSTAR I** and provide an additional 100 channels of sports and niche programming for the company's budding DISH Network satellite television service. Latest word from Echostar is that bird should be ready for service by **11-1-96**. . .next door at **123°W**, **Hughes Communications'** newest satellite, **GALAXY 9**, now completely loaded with customers following its **May 23rd** launch (see pg 12). C-Band-only HS376 Hughes-built spacecraft employing bulk of capacity for analog and digital video traffic, with the exception of 6 channels **(tr's 4, 6, 12, 16, 20 & 24)** allocated to **General Communications, Inc.** for delivery of telephony and data services in Alaska. Placement of G9 in **123°W** slot effectively displaced prior tenant **AT&T's TELSTAR 303**, sending the aging AT&T bird 3 degrees east to **120°W**, to wobble out its final months in inclined orbit. . .in wake of **Viacom Networks'** migration of all their west coast feeds to GALAXY 9 from **GE SATCOMS C3 & C4**, vacant transponders of latter birds have now become new home to **MTV2 (C3/16)**, **TV LAND (C3/18)**, **SHOWTIME 2 (C4/20)** and **FLIX (C4/22)**. . .speaking of SATCOM C4, Lenfest's **THE BOX**, dropping out of satellite carriage from **TR-11**, in favor of stand-alone tape delivery, created temporary void - which was quickly filled with analog, in-the-clear feed of upstart programmer, **SPEEDVISION.** Prior to C4, service had only been available via **Group W's Digicipher TR-9.6** on C-Band **GALAXY 7**. . .Bill & Ted move over - and make room for Rupert: **FOX NEWS CHANNEL (FNC)** inaugurates service on **GALAXY 7**, **transponder 20**, **10-7-96**. 24/hr a day news programmer will go head-to-head against CNN and MSNBC for precious cable and satellite viewers. . .more News News: joint programming effort by CNN and Sports Illustrated, **CNNSI**, scheduled to begin **12-1-96** on **SPACENET 3/TR-6(11)**, in analog format. Digital Digicipher feed of same service will be sent on **GALAXY 1R/TR-15.5**, joining **CNNfn** and **CNNI** (which just recently converted to digital from analog) on **TR's 15.0 & 15.1**, respectively. Meanwhile, the original shared CNNfn/CNNI analog feed that was originally in the G1R/15 slot, has now moved to **SPACENET 3, TR-16U(16)**. Follow that?. . .first major North American tv network to go solely digital compressed is Canada's **CTV**. Programmer now uses Scientific-Atlanta technology to feed its Red, Blue & Green networks to its affiliates over a full bandwidth MCPC on **ANIK E1/TR-8B(16)**. Can the CBC and Global be far behind?. . .Ku-Band transponder capacity shortage? You bet - it's real and it's here. With **TCI** finally implementing its much-ballyhooed **Headend-n-the-Sky** project **9-1-96** and loading up its **12 transponders** on Ku-Band **GALAXY 7**, former occasional users are being forced to scramble elsewhere for what little time is now available. And even with the advent of the new GE-1 (95% Ku sold out), near-term prospects don't seen much brighter. . .Satellite Obits: Ku-Band GE GSTAR 3, retired first week of September. RIP.

Numbers appearing in parens immediately following transponder numbers for TELSTAR, SPACENET, MORELOS, SOLIDARIDAD and ANIK C-Band satellites indicate **actual dial position** for that transponder on a typical 24-channel satellite receiver.

Numbers in parens immediately following programming description indicate audio subcarrier(s) used for that particular service.

SUBSCRIPTION INFORMATION

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ALASCOM AURORA 2/GE SATCOM C5 (139°W)

Polarization: ODD—Vertical EVEN—Horizontal

TR—18 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
NEWSLINK ALASKA—statewide newsfeed service (5.8)
TEAMSWORK—Alaska Dept. of Education collaborative education network (5.8)
UNIVERSITY OF ALASKA—University of Alaska distance learning network (5.8/6.8)
ANCHORAGE CITY COUNCIL PROCEEDINGS (5.8/6.8)

TR—24 **ALASKA SATELLITE TELEVISION PROJECT/ALASKA'S SUPERSTATION**—various network & independent programming (5.8)

Subcarrier Audio Services on AURORA 2/SATCOM C5

TR—24 **ARIES**—newspaper & book reading service for the sight-impaired (6.48)
KSKA-FM—Anchorage, AK—Alaska Public Radio affiliate (7.38/7.56 discrete stereo)

SCPC Audio Services on AURORA 2/SATCOM C5

TR—3 **ILLINOIS FARM BUREAU RAIO NETWORK** (55.20)
WGN-AM, Chicago, IL—news, talkradio format, WGN Truckers Network; Cubs, Bears flagship (55.40)
OCCASIONAL AUDIO (57.60)
OCCASIONAL AUDIO (57.60)
MISSOURINET (59.40)
MISSOURINET/ST. LOUIS BLUES RADIO NETWORK (59.60)
MISSOURINET (59.80)
MISSOURINET (60.00)
KANSAS INFORMATION NETWORK (63.40)
NEBRASKA SPORTS/AGRICULTURE NETWORK (63.60)
MISSOURINET— St. Louis Cardinals Radio Network (63.80)
WIBW-FM, Topeka, KS—country & western music format; Royals baseball, Chiefs football (64.30)
NO. CAROLINA NEWS NETWORK/WPTF-AM, Raleigh-Durham, NC—statewide news service; NC State sports; Washington Redskins football, talk radio format (72.70)
MISSOURINET (72.90)
KANSAS UNIVERSITY SPORTS (73.10)
UNIV. OF MISSOURI SPORTS (73.80)
PEOPLE'S RADIO NETWORK—talkradio format (74.00
CAPITOL SPORTS NETWORK/CHARLOTTE HORNETS RADIO NETWORK/DURHAM BULLS RADIO NETWORK/WAKE FOREST UNIV. SPORTS (75.40)
NO. CAROLINA NEWS NETWORK—statewide news service; talkradio format (75.60)
NO. CAROLINA NEWS NETWORK—state news service; NC State sports; East Carolina sports (75.80)
ILLINOIS NEWS NETWORK —state news service; University of Illinois sports (76.00)
CAPITOL SPORTS NETWORK/UNIVERSITY OF NORTH CAROLINA SPORTS (76.60)
MISSOURINET—state news service; University of Missouri sports (77.10)
NORTH CAROLINA NEWS NETWORK (77.40)
VIRGINIA NEWS NETWORK—state news service; University of Virginia sports (77.70)
IOWA RADIO NETWORK/IOWA STATE SPORTS (77.90)
RADIO PENNSYLVANIA NETWORK Harrisburg, PA—state radio news, weather, special regional programming and professional sports distribution (81.30/81.50/81.70)
IOWA RADIO NETWORK/UNIV. OF IOWA SPORTS (85.40)

TR—4 **KBRW-AM,** Barrow, AK—Alaska Public Radio affiliate (76.92)
KOTZ-AM, Kotzebue, AK—Alaska Public Radio affiliate (76.96)

TR—10 **INSTORE SATELLITE NETWORK**—background music for supermarket/department store chains (53.80/55.16/56.52)
WJSO-FM, Pikeville, KY—religious; Moody Radio affiliate (59.20)

TR—21 **UNISTAR RADIO NETWORKS/AC II** (56.40/56.80 stereo)
CNN RADIO NETWORK (56.60)
UNISTAR RADIO NETWORKS/AM ONLY (57.20/57.40 stereo)
UNISTAR RADIO NETWORKS/THE OLDIES CHANNEL (57.60/58.00 stereo)
CNN RADIO NETWORK—all news radio feed (58.20)
UNISTAR RADIO NETWORKS/UNISTAR COUNTRY—country & western music format (65.20/65.40 stereo)

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WESTSAT COMMUNICATIONS

UNISTAR RADIO NETWORKS/FORMAT 41 (65.60/66.00 stereo)
UNISTAR RADIO NETWORKS/UNISTAR COUNTRY—country & western music format (66.80/67.60 stereo)

DATS/SEDATS Audio Services on AURORA 2

TR—15
CH-00 WESTWOOD ONE/MBS
CH-01 WESTWOOD ONE/MBS
CH-02 EQUITY RADIO NETWORK (0)
TALK RADIO NETWORK (1)
CH-03 NBC RADIO NETWORK (0)
NBC RADIO NETWORK (1)
CH-04 WESTWOOD ONE/MBS (0)
WESTWOOD ONE/MBS (1)
CH-05 WESTWOOD ONE/MBS (0)
WESTWOOD ONE/MBS (1)
CH-06 WESTWOOD ONE/MBS (0)
WESTWOOD ONE/MBS (1)
CH-07 NBC RADIO NETWORK
CH-08 NBC RADIO NETWORK
CH-09 NBC RADIO NEWS (East) (0)
NBC RADIO NEWS (Central/Mountain) (1)
CH-10 EQUITY RADIO NETWORK (0)
CH-11 NBC RADIO NETWORK/TALKNET (0)
NBC RADIO NETWORK/SPARE (1)
CH-12 CNN RADIO NETWORK
CH-13 UNISTAR/SPECIALS
CH-14 UNISTAR (Left)
CH-15 UNISTAR (Right)
CH-16 TALK AMERICA RADIO NETWORK (0)
BOSTON BRUINS/CELTICS RADIO NETWORK (1)
CH-17 CNBC BUSINESS RADIO (0)
CH-18 ONE-ON-ONE SPORTS RADIO NETWORK (0)
BOSTON RED SOX RADIO NETWORK (1)
BOSTON CELTICS RADIO NETWORK (1)

TR—19
CH-00 IDB COMMUNICATIONS/OCCASIONAL AUDIO
CH-01 IDB COMMUNICATIONS/OCCASIONAL AUDIO
CH-02 IDB COMMUNICATIONS/OCCASIONAL AUDIO
CH-03 SPORTSFAN RADIO NETWORK (0)
BALTIMORE ORIOLES RADIO NETWORK (1)
CH-04 CINCINNATI REDS RADIO NETWORK (0)
IDB COMMUNICATIONS/OCCASIONAL AUDIO (1)
SCH-15 UNISTAR HOT COUNTRY (Left)
SCH-16 UNISTAR HOT COUNTRY (Right)
SCH-17 IDB COMMUNICATIONS/OCCASIONAL AUDIO
NORTHWEST DIRECT RADIO NETWORK
CH-06 IDB COMMUNICATIONS/OCCASIONAL AUDIO
TALK AMERICA RADIO NETWORK (0)
OCCASIONAL AUDIO (1)
CH-07 SPORTS RADIO NETWORK (0)
SAN FRANCISCO GIANTS RADIO NETWORK (1)
CH-08 UNISTAR/ADULT ROCK & ROLL (Left)
CH-09 UNISTAR/ADULT ROCK & ROLL (Right)
CH-10 IDB COMMUNICATIONS/OCCASIONAL AUDIO
CH-11 IDB COMMUNICATIONS/OCCASIONAL AUDIO
CH-12 IDB COMMUNICATIONS/OCCASIONAL AUDIO
SAN JOSE SHARKS RADIO NETWORK
CH-13 IDB COMMUNICATIONS/OCCASIONAL AUDIO
CH-14 IDB COMMUNICATIONS (Left)
CH-15 IDB COMMUNICATIONS (Right)
CH-16 IDB COMMUNICATIONS/OCCASIONAL AUDIO
MRN (Motor Racing Network)
CH-17 IDB COMMUNICATIONS/OCCASIONAL AUDIO
CH-18 IDB COMMUNICATIONS/OCCASIONAL AUDIO

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TR—23

SCH-00 ABC RADIO NETWORK SATELLITE SERVICES/OCCASIONAL FEEDS
SCH-01 ABC RADIO NETWORK/NEWS NET 1 (East)
SCH-02 ABC RADIO NETWORK/NEWS NET 1 (Central/Mountain)
SCH-03 ABC RADIO NETWORK/NEWS NET 1 (Pacific)
SCH-04 ABC RADIO NETWORK/NEWS NET 2 (East)
SCH-05 ABC RADIO NETWORK/NEWS NET 2 (Central/Mountain)
SCH-06 ABC RADIO NETWORK/NEWS NET 2 (Pacific)
SCH-07 ABC RADIO NETWORK/NEWS NET 3 (East)
SCH-08 ABC RADIO NETWORK/NEWS NET 3 (Central/Mountain)
SCH-09 ABC RADIO NETWORK/NEWS NET 3 (Pacific)
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SCH-21 WOR RADIO NETWORK
SCH-22 BLOOMBERG INFORMATION RADIO NETWORK
SCH-23 STANDARD NEWS RADIO NETWORK
SCH-24 SW NETWORKS
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NEW YORK YANKEES RADIO NETWORK
SCH-26 ABC RADIO NETWORK SATELLITE SERVICES/OCCASIONAL FEEDS
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SCH-30 ABC RADIO NETWORK SATELLITE SERVICES/OCCASIONAL FEEDS
SCH-31 ABC RADIO NETWORK SATELLITE SERVICES/OCCASIONAL FEEDS
SCH-32 ABC RADIO NETWORK SATELLITE SERVICES/OCCASIONAL FEEDS
SCH-33 ABC RADIO NETWORK SATELLITE SERVICES/OCCASIONAL FEEDS
SCH-34 ABC RADIO NETWORK SATELLITE SERVICES/OCCASIONAL FEEDS
SCH-35 ABC RADIO NETWORK SATELLITE SERVICES/OCCASIONAL FEEDS
SCH-36 CBS RADIO NETWORK (East)
SCH-37 CBS RADIO NETWORK (Central/Mountain)
SCH-38 CBS RADIO NETWORK (Pacific)
SCH-39 CBS RADIO NETWORK/LONG FORM NEWS
SCH-40 CBS RADIO NETWORK/LONG FORM SPORTS
SCH-41 CBS RADIO NETWORK/LONG FORM SECONDARY NEWS & SPORTS
SCH-42 CBS RADIO NETWORK/OCCASIONAL AUDIO
SCH-43 CBS RADIO NETWORK/OCCASIONAL AUDIO
SCH-44 CBS RADIO NETWORK/OCCASIONAL AUDIO
NEW YORK METS RADIO NETWORK
SCH-45 CBS RADIO NETWORK/STEREO (Left)
SCH-46 CBS RADIO NETWORK/STEREO (Right)
SCH-47 ABC RADIO NETWORK SATELLITE SERVICES/OCCASIONAL FEEDS
DALLAS MAVERICKS RADIO NETWORK
SCH-48 ABC RADIO NETWORK COMMERCIAL BULK FEEDS (Left)/occasional feeds
SCH-49 ABC RADIO NETWORK COMMERCIAL BULK FEEDS (Right)/occasional feeds
SCH-50 ABC RADIO NETWORK NEWS-BULLETINS/SPECIAL REPORTS/STATUS REPORTS
BUSINESS WEEK FINANCIAL REPORTS
SCH-51 ABC RADIO NETWORK NEWS/SPECIAL EVENTS PROGRAMMING
SCH-52 ABC RADIO NETWORK AFFILIATE SERVICE CHANNEL
SCH-53 ABC RADIO NETWORK NEWS
SCH-54 ABC RADIO NETWORK TALK PROGRAMMING/OCCASIONAL FEEDS
SCH-55 MAJOR TALK RADIO NETWORK
SCH-56 DOW JONES RADIO NETWORK

GE SATCOM C1 (137°W)

Polarization: ODD—Horizontal
EVEN—Vertical

TR—1 **PRIME NETWORK** —national sports programming network (fully encrypted/GI VIDEOCIPHER II)
TR—2 **KMGH-TV,** Denver—ABC Network affiliate (fully encrypted/GI VIDEOCIPHER II)
TR—3 **KRMA-TV,** Denver—PBS Network affiliate (fully encrypted/GI VIDEOCIPHER II)
TR—4 **SPORTSCHANNEL PACIFIC**—Northern California regional sports service featuring home/away Athletics & Giants baseball, Warriors basketball & Sharks hockey (fully encrypted/GI VIDEOCIPHER II)
TR—5 **KDVR,** Denver—Fox Network affiliate (fully encrypted/GI VIDEOCIPHER II)
TR—6 **KCNC-TV,** Denver—CBS Network affiliate (fully encrypted/GI VIDEOCIPHER II)
TR—7 **PRIME SPORTS WEST**—Southern California regional sports service featuring Lakers basketball, Kings hockey & Angels baseball (fully encrypted/GI VIDEOCIPHER II)
TR—8 **NBC TELEVISION NETWORK**—NBC regularly scheduled network programming (5.8/6.2 stereo, 6.8 mono) (Eastern time zone feed)
TR—9 **CLASSIC SPORTS NETWORK**—classic sports events, television series, specials & documentaries (6.8)
TR—10 **PRIME SPORTS SOUTHWEST**—regional sports service for the Southwest featuring Astros baseball & Rockets basketball (fully encrypted/GI VIDEOCIPHER II)
TR—11 **N1** (Network One)—movies, syndicated variety & entertainment programming (6.2/6.8 stereo)
TR—13 **SPORTSCHANNEL CHICAGO**—regional Chicago area sports service featuring Bulls basketball & Blackhawks hockey (6.2/6.8)(video encrypted/GI VIDEOCIPHER II)
TR—14 **KUSA-TV,** Denver—NBC Network affiliate (fully encrypted/GI VIDEOCIPHER II)
TR—15 **RAINBOW COMMUNICATIONS**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
SPORTSCHANNEL OHIO—regional Ohio area sports service featuring Indians baseball & Cavaliers basketball (6.2/6.8)(video encrypted/GI VIDEOCIPHER II)
SPORTSCHANNEL CINCINNATI—regional sports service featuring Reds baseball (fully encrypted/GI VIDEOCIPHER II)
TR—16.0 **PRIME DEPORTIVA**—Hispanic-oriented regional sports service for Southern California (digital video/GI DIGICIPHER)
16.1 **PRIME TICKET SAN DIEGO REGIONAL**—pay San Diego regional sports service featuring Padres baseball & San Diego State University sports (digital video/GI DIGICIPHER)
TR—17 **PRIME SPORTS NETWORK**—occasional transmissions: sports events, news & network feeds (video encrypted/GI VIDEOCIPHER II)
SPORTSCHANNEL FLORIDA—regional Florida sports service (fully encrypted/GI VIDEOCIPHER II)
PRIME SPORTS ROCKY MOUNTAIN—regional sports service (fully encrypted/GI VIDEOCIPHER II)
PRIME SPORTS UPPER MIDWEST—regional sports service featuring Timberwolves Basketball & Northstars Hockey (fully encrypted/GI VIDEOCIPHER II)
PRIME SPORTS MIDWEST—regional sports network featuring Pacers Basketball (fully encrypted/GI VIDEOCIPHER II)
TR—18 **PRIME SPORTS NETWORK**—occasional transmissions: sports events, news & network feeds (fully encrypted/GI VIDEOCIPHER II)
TCC (The California Channel)—live coverage of California State Assembly proceedings (6.2/6.8)
TR—19 **FOX NET**—Fox Broadcasting Co. white area service (fully encrypted/GI VIDEOCIPHER II)
TR—20 **THE SPACE CONNECTION**—proprietary distance learning network (digital video)
TR—21 **OCCASIONAL TRANSMISSIONS** —sports events, news & network feeds (6.2/6.8)
SPORTSCHANNEL ALTERNATE PROGRAMMING NETWORK (fully encrypted/GI VIDEOCIPHER II)
TR—22 **PRIME SPORTS NORTHWEST**—Northwest regional sports wervice featuring Sonics basketball, Mariners baseball (fully encrypted/GI VIDEOCIPHER II)
IDEANET-STEP STAR NETWORK—college language telecourses (6.2/6.8)
TR—23 **KWGN-TV,** Denver—independent Denver station featuring Rockies baseball (fully encrypted/GI VIDEOCIPHER II)
TR—24 **SUNSHINE NETWORK**—regional sports service for Florida & the Southeast featuring Marlins baseball, Heat and Magic basketball (fully encrypted/GI VIDEOCIPHER II)

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Subcarrier Audio Services on SATCOM C1

TR—2	**PEOPLE'S RADIO NETWORK**—talkradio format (7.5)
TR—5	**TRN** (Talk Radio Network)—live call-in talkradio network (5.8)
TR—6	**THE BONNEVILLE INTERNATIONAL LDS RADIO NETWORK**—Church of Jesus Christ Latter Day Saints Radio Network feed (5.58)
TR—7	**LOS ANGELES LAKERS RADIO NETWORK** (7.38)
TR—10	**KHCB-FM,** Galveston, TX—Christian Radio flagship station (7.3)

GE SATCOM C4 (135°W)

Polarization: ODD-Vertical EVEN-Horizontal

TR—1	**AMC** (American Movie Classics)—vintage/classic movies with daily theme presentation (fully encrypted/GI VIDEOCIPHER II)
TR—2.0	**REQUEST 2**—24 hr/day pay-per-view first run movie service (GI DIGICIPHER digital video)
2.1	**REQUEST 3**—24 hr/day pay-per-view first run movie service (GI DIGICIPHER digital video)
2.2	**STARZ!** (East)—Encore pay premium movie service (digital video/GI DIGICIPHER)
2.5	**REQUEST 4**—24 hr/day pay-per-view first run movie service (GI DIGICIPHER digital video)
2.6	**REQUEST 5**—24 hr/day pay-per-view first run movie service (GI DIGICIPHER digital video)
2.7	**STARZ!** (West)—Encore pay premium movie service (digital video/GI DIGICIPHER)
TR—3	**NICKELODEON/NICK-AT-NITE** (East)—premium children's programming (fully encrypted/GI VIDEOCIPHER II)
TR—4	**LIFETIME** (East)—health and personal improvement programming (fully encrypted/GI VIDEOCIPHER II)
TR—5	**DEUTSCHE WELLE TV**—North American service of Germany's world TV network (6.8)
TR—6	**MSG 1** (Madison Square Garden Cable Network)—Northeastern regional sports network featuring Yankees baseball, Knicks basketball & Rangers hockey (fully encrypted/GI VIDEOCIPHER II)
TR—7	**BRAVO**—performing & cultural arts programming (6.2/6.8)(video encrypted/GI VIDEOCIPHER II)
TR—8	**PREVUE GUIDE CHANNEL**—satellite TV programming graphic scheduling & video promotion service (6.2-right screen/6.8-left screen)
TR—9	**QVC NETWORK**—quality product shop-at-home service (6.2/6.8)
TR—10	**HSN** (Home Shoping Network)—premium product shop-at-home service (6.2/6.8)
TR—11	**SPEEDVISION**—auto, boating & aviation instructional, features and documentary programs (6.2/6.8)
TR—12	**STARNET**—cable network cross-channel promotional service (6.2/6.8)
TR—13	**THE TRAVEL CHANNEL**—worldwide travel features/information promotion service (fully encrypted/GI VIDEOCIPHER II)
TR—14	**FIT TV**—general fitness, exercise & healthy living programming (6.2/6.8 stereo)
TR—15	**WWOR-TV**, Secaucus, NJ—Notrheast's top-rated independent station (fully encrypted/GI VIDEOCIPHER II)
TR—16	**REQUEST 1**—24 hr/day pay-per-view first run movie service (fully encrypted/GI VIDEOCIPHER II)(Spanish-6.2/6.8 stereo)
TR—17	**MTV** (Music Television)(East) —pop/rock music videos (fully encrypted/GI VIDEOCIPHER II)
TR—18.5	**CONTINUOUS HITS 1**—Viewer's Choice repeat pay-per-view first-run movie service (GI DIGICIPHER digital video)
18.6	**CONTINUOUS HITS 2**—Viewer's Choice repeat pay-per-view first-run movie service (GI DIGICIPHER digital video)
18.1	**CONTINUOUS HITS 3**—Viewer's Choice repeat pay-per-view first-run movie service (GI DIGICIPHER digital video)
18.0	**HOT CHOICE**—24 hr/day adult-oriented premium movie service (GI DIGICIPHER digital video)
TR—19	**C-SPAN 2/SENATE** —live coverage of U.S. Senate proceedings (6.8)
TR—20	**SHOWTIME 2** (East) —multiplex Showtime service (fully encrypted/GI VIDEOCIPHER II)
TR—21	**DISCOVERY CHANNEL** (East)—science/nature documentary programming (fully encrypted/GI VIDEOCIPHER II)
TR—22	**FLIX**—movie classix from 60's-80's (fully encrypted/GI VIDEOCIPHER II)
TR—23	**VH-1** (Video Hits One) —adult contemporary music videos (fully encrypted/GI VIDEOCIPHER II)
TR—24	**CMTV** (Country Music Television)—country music videos (fully encrypted/GI VIDEOCIPHER II)

Subcarrier Audio Services on SATCOM C4

TR—5	**LIGHT 'N LIVELY EASY LISTENING** (5.58)
	RADIO DEUTSCHE WELLE (7.02)
	RADIO DEUTSCHE WELLE STEREO (7.2/7.38 & 7.38/7.56 discrete stereo)
	RADIO DEUTSCHE WELLE FOREIGN LANGUAGE SERVICE (7.74)
	RADIO DEUTSCHE WELLE—occasional audio (8.1)

continued on next page

TR—6	**WQCD-FM,** New York—smooth jazz format (6.2)
TR—8	**UNITED VIDEO BACKGROUND MUSIC** (5.895 mono)
	SOS RADIO NETWORK (KILA-FM), Las Vegas, NV—adult Christian music & talk (7.38/7.56 discrete stereo)
TR—10	**IN TOUCH**—newspaper & book reading service for the sight-impaired (7.875)
	BRN (Business Radio Network) (8.055)
	WUSF-FM, Tampa, FL—classical, jazz music format; NPR, PRI affiliate (8.235)
TR—15	**WQXR-FM,** New York—classical radio format (6.3/6.48 discrete stereo)
TR—24	**WSM-AM,** Nashville, TN—country & western format (7.38/7.56 discrete stereo)

HUGHES GALAXY 1R (133°W)

Polarization: ODD—Horizontal
EVEN—Vertical

TR—1	**COMEDY CENTRAL** (West)—24 hr/day all-comedy programming (fully encrypted/GI VIDEOCIPHER I I)
TR—2.1	**UNIVISION**—Spanish language entertainment & informational programming (digital video/S-A MPEG II)
2.5	**GALAVISION**—premium Spanish oriented entertainment programming (digital video/S-A MPEG II)
2.8	**TELEHIT**—music videos from Mexico (digital video/S-A MPEG II)
TR—3	**ENCORE** (East)—movie classics from the 60's - 80's (fully encrypted/GI VIDEOCHIPER II)
TR—4.0	**TVFN** (TV Food Network)—home culinary arts & informational programming (digital video/GI VIDEOCIPHER)
4.1	**OUTDOOR LIFE**—outdoor recreation, conservation, wilderness & adventure programming (digital video/GI DIGICIPHER)
4.5	**CANAL DE NOTICIAS**—NBC Hispanic 24 hr/day all-news service (digital video/GI DIGICIPHER)
4.6	**AHN** (America's Health Network)—interactive viewer health & medical information programming; medical-related products shop-at-home service (digital video/GI DIGICIPHER)
TR—5	**CLASSIC ARTS SHOWCASE**—classic arts music videos including ballet & opera (6.2/6.8 stereo)
TR—6	**Z MUSIC**—Christian-oriented pop/rock videos (6.2/6.8 stereo, 7.38/7.56 discrete stereo)
TR—7	**THE DISNEY CHANNEL** (West)—premium family entertainment from the Disney studios (fully encrypted/GI/VIDEOCIPHER II)
TR—8	**CARTOON NETWORK**—24 hr/day cartoon service (fully encrypted/GI VIDEOCIPHER II)
TR—9	**ESPN 2 BLACKOUT NETWORK**—part-time alternate sports programming for regional blackout applications (fully encrypted/GI VIDEOCIPHER) (6.2/6.8)
	SHOP-AT-HOME NETWORK—shop-at-home service (6.8)
TR—10	**MSNBC**—24 hr/day news (6.2/6.8)
TR—11	**EWTN** (Eternal Word Television Network)—religious (5.76-Spanish, 6.2/6.8-English)
TR—12	**VALUEVISION**—shop-at-home service (6.2/6.8)
TR—13.0	**ENCORE 5-ACTION** (digital video/GI DIGICIPHER)
13.1	**ENCORE 2-LOVE STORIES** (digital video/GI DIGICIPHER)
13.2	**ENCORE 3-WESTERNS** (digital video/GI DIGICIPHER)
13.5	**ENCORE 6-TRUE STORIES & DRAMA** (digital video/GI DIGICIPHER)
13.6	**ENCORE 4-MYSTERY** (digital video/GI DIGICIPHER)
13.7	**ENCORE 7-WAM** (digital video/GI DIGICIPHER)
TR—14	**ESPN BLACKOUT NETWORK**—part-time alternate sports programming for regional blackout applications (fully encrypted/GI VIDEOCIPHER II)
	SHOP-AT-HOME NETWORK—shop-at-home service (6.8)
	OCCASIONAL TRANSMISSIONS—sports events, news & network feeds (6.2/6.8)
TR—15.0	**CNNfn** (CNN Financial News)—financial news programming (digital video/GI DIGICIPHER MCPC)
15.1	**CNNI** (Cable News Network International)—24 hr/day international news & features (digital video/GI DIGICIPHER MCPC)
15.5	**CNNSI** (Cable News Network/Sports Illustrated) (digital video/GI DIGICIPHER MCPC) (begins 12-9-96)
TR—16	**TCM** (Turner Classic Movies)—classic movies from the Turner film library (fully encrypted/GI VIDEOCIPHER II)
TR—17	**NEW INPIRATION NETWORK**—religious, family-oriented variety & entertainment (6.2/6.8)
TR—18.0	**HBO 2** (Home Box Office)(East)—multiplexed HBO service (digital video/GI DIGICIPHER)
18.1	**HBO 3** (Home Box Office)(East)—multiplexed HBO service (digital video/GI DIGICIPHER)
18.6	**HBO 2** (Home Box Office)(West)—multiplexed HBO service (digital video/GI DIGICIPHER)
18.5	**HOME BOX OFFICE CINEMAX 2**—multiplexed CINEMAX service (digital video/GI DIGICIPHER)
TR—19	**HOME BOX OFFICE CINEMAX** (East)—time-structured HBO (fully encrypted/GI VIDEOCIPHER I I)
TR—20	**HGTV** (Home & Garden Television Network)—home repair, remodeling, decorating & gardening programming (fully encrypted/GI VIDEOCIPHER II)

continued on next page

TR—21 **USA NETWORK** (West)—syndicated variety and sports events programming (6.2 sap) (fully encrypted/GI VIDEOCIPHER II)
TR—22 **THE NOSTALGIA CHANNEL**—vintage movie classics from the 1920's to 1950's (6.2/6.8)
TR—23 **HOME BOX OFFICE**—digital video
TR—24 **GSN** (Global Shopping Network)—shop-at-home service (6.2/6.8)

Subcarrier Audio Services on Galaxy 1R

TR—11 **EWTN RADIO NETWORK** (English)(5.4)
EWTN RADIO NETWORK (Spanish)(5.58)
TR—17 **HEAVEN RADIO**—religious (7.92)

GE SATCOM C3 (131°W)

Polarization: ODD—Vertical EVEN—Horizontal

TR—1 **THE FAMILY CHANNEL** (West)—general family entertainment (fully encrypted/GI VIDEOCIPHER II)
TR—2 **THE LEARNING CHANNEL** —educational (6.2/6.8)
TR—3 **VIEWER'S CHOICE 1**—24 hr/day pay-per-view movie service (fully encrypted/GI VIDEOCIPHER II) (Spanish language SAP-6.8)
TR—4 **LIFETIME** (West)—health & personal improvement programming (fully encrypted/GI VIDEOCIPHER II)
TR—5 **ODYSSEY**—multidenominational religious programming (6.2/6.8)
TR—6.0 **COURT TV**—live/taped courtroom proceedings and analysis (digital video/GI DIGICIPHER)
TR—7 **C-SPAN/HOUSE** —live coverage from the U.S. House of Representatives (6.8)
TR—8 **QVC NETWORK 2**—quality product shop-at-home service (6.2/6.8)
TR—9 **MUSIC CHOICE**—digital audio music services
TR—10 **HSC SPREE** (Home Shopping Club)—shop-at-home service (6.2/6.8)
TR—11 **NEWSPORT**—national cable sports network (fully encrypted/GI VIIDEOCHIPER II)
TR—12 **THE HISTORY CHANNEL**—U.S. History features & documentary programming (fully encrypted/GI VIDEOCIPHER II)
TR—13 **THE WEATHER CHANNEL**—24 hr/day national & regional weather/environmental reporting (fully encrypted/GI VIDEOCIPHER II)
TR—14 **NESN** (New England Sports Network)—regional sports network featuring Red Sox baseball & Bruins hockey (fully encrypted/GI VIDEOCIPHER II)
TR—15 **SHOWTIME** (East)—first-run movies & entertainment specials (fully encrypted/GI VIDEOCIPHER II)
TR—16 **MTV2** (Music Television)—pop/rock videos (6.2/6.8 stereo)
TR—17 **THE MOVIE CHANNEL** (East)—24 hr/day first-run movies (fully encrypted/GI VIDEOCIPHER II)
TR—18 **TV LAND**—Nick-at-Nite service featuring classic syndication series from 60's & 70's (6.2/6.8)
TR—19.0 **SHOWTIME 2**—multiplexed Showtime service (digital video/GI DIGICIPHER)
19.1 **MTV LATINO**—MTV service for Latin American distribution (digital video/GI DIGICIPHER)
19.5 **FLIX**—movie classics from 60's - 80's (digital video/GI DIGICIPHER)
TR—20.0 **PRODUCT INFORMATION NET**—program-length infomercials (digital video/GI DIGICIPHER)
20.1 **JONES COMPUTER NETWORK**—home computer training & information (digital video/GI DIGICIPHER)
20.6 **GREAT AMERICAN COUNTRY**—24hr/day country music videos (digital video/GI DIGICIPHER)
TR—21 **COMEDY CENTRAL** (East)—24 hr/day all-comedy programming (fully encrypted/GI VIDEOCIPHER II)
TR—22.0 **YOUR CHOICE TELEVISION 1**—variety and entertainment programming (digital video/GI DIGICIPHER)
22.1 **YOUR CHOICE TELEVISION 2**—variety and entertainment programming (digital video/GI DIGICIPHER)
22.2 **YOUR CHOICE TELEVISION 3**—variety and entertainment programming (digital video/GI DIGICIPHER)
22.3 **YOUR CHOICE TELEVISION 4**—variety and entertainment programming (digital video/GI DIGICIPHER)
TR—23 **E! ENTERTAINMENT**—motion picture previews & special features (fully encrypted/GI VIDEOCIPHER II)
TR—24 **DMX** (Digital Music Express)—digital audio music service (30 channels)

Subcarrier Audio Services on SATCOM C3

TR—1 **STANDARD NEWS** (6.2)
TR—7 **C-SPAN AUDIO 1**—live congressional hearings & English language foreign radio services (5.22)
C-SPAN AUDIO 2—BBC World Service (5.4)
TR—23 **CRN** (Cable Radio Network) 24 hr/day adult contemporary/oldies; talkshow format (7.235)

WESTSAT COMMUNICATIONS

GE GSTAR 2 (Ku) (125°W)

inclined orbit satellite

Polarization: 1—8: Horizontal
9—16: Vertical

TR—2 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—3 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—4 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—5 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—6 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—7 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—8 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—10 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—11 **GSTAR 2 ID CHANNEL** (6.2)
TR—12 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—13 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—14 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—15 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—16 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

HUGHES GALAXY 5 (125°W)

Polarization: ODD—Horizontal
EVEN—Vertical

TR—1 **THE DISNEY CHANNEL** (East)—premium family entertainment from the Disney studios (fully encrypted/GI VIDEOCIPHER II)
TR—2 **PLAYBOY TV**—24 hr/day adult-oriented entertainment & sexually oriented pay-per-view "R"-rated movies (fully encrypted/GI VIDEOCIPHER II)
TR—3 **TBN** (Trinity Broadcasting Network)—religious (5.58 & 5.76 discrete stereo/6.8 mono)
TR—4 **SCI-FI CHANNEL**—science fiction movies and series syndicated programming (fully encrypted/GI VIDEOCIPHER II)
TR—5 **CNN** (Cable News Network)—24 hr/day news (fully encrypted/GI VIDEOCIPHER II)
TR—6 **TBS SUPERSTATION**—Atlanta superstation featuring Braves baseball and Hawks basketball (fully encrypted/GI VIDEOCIPHER II)
TR—7 **WGN-TV,** Chicago, IL—Midwest superstation featuring Cubs & White Sox baseball and Bulls basketball (fully encrypted/GI VIDEOCIPHER II)
TR—8 **HBO** (Home Box Office) (West)—first run movies, sports events and entertainment specials (fully encrypted/GI VIDEOCIPHER II)
TR—9 **ESPN**—24 hr/day sports programming (fully encrypted/GI VIDEOCIPHER II)
TR—10 **MOR MUSIC TV**—audio CD/cassette point-of-purchase music video service (5.58/5.76 discrete stereo/6.8 mono/6.3 Wegener MPEG digital audio)
TR—11 **THE FAMILY CHANNEL** (East)—general family entertainment (fully encrypted/GI VIDEOCIPHER II)
TR—12 **DISCOVERY CHANNEL** (West)—science/nature documentary programming (fully encrypted/GI VIDEOCIPHER II)
TR—13 **CNBC** (Consumer News & Business Channel)—consumer news information & business market reports (fully encrypted/GI VIDEOCIPHER II)
TR—14 **ESPN 2**—alternate network sports programming (fully encrypted/GI VIDEOCIPHER II)
TR—15 **HBO** (Home Box Office) (East)—first run movies, sports events and entertainment specials (fully encrypted/GI VIDEOCIPHER II)
TR—16 **HOME BOX OFFICE CINEMAX** (West)—time-structured HBO (fully encrypted/GI VIDEOCIPHER II)
TR—17 **TNT** (Turner Network Television)—variety entertainment service; NBA basketball, NFL football (fully encrypted/GI VIDEOCIPHER II)
TR—18 **TNN** (The Nashville Network)—premium country music/entertainment (fully encrypted/GI VIDEOCIPHER II)
TR—19 **USA NETWORK** (East)—syndicated variety programming (6.2 sap)(fully encrypted/GI VIDEOCIPHER II)
TR—20 **BET** (Black Entertainment Network)—black-oriented variety entertainment, sports events & music videos (5.58/5.76 discrete stereo, 6.8 mono)
TR—21 **ME/U** (Mind Extension University)—humanities/sciences informational programming (6.8)
TR—22 **CNN HEADLINE NEWS**—CNN newsbrief headline service (fully encrypted/GI VIDEOCIPHER II)
TR—23 **A&E CABLE NETWORK**—performing & cultural arts programming (fully encrypted/GI VIDEOCIPHER II)

continued on next page

TR—24-A1 **SHOWTIME** (East)—24 hr/day premium movie service & entertainment specials (digital video/S-A MPEG II)
24-A2 **THE MOVIE CHANNEL** (West)—24 hr/day premium movie service (digital video/S-A MPEG II)
24-A3 **SHOWTIME** (West)—24 hr/day premium movie service & entertainment specials (digital video/S-A MPEG II)
24-B1 **SUNDANCE CHANNEL**—motion pictures from independent film makers (digital video/S-A MPEG II)

Subcarrier Audio Services on GALAXY 5

TR—2 **KLON,FM,** Long Beach, CA—jazz music format (5.58/5.76 discrete stereo)
TR—5 **CNN RADIO NETWORK**—all news radio feed (7.56)
TR—6 **BROTHER STAIR RADIO NETWORK**—religious talkradio & discussion (6.435)
WORLD RADIO NETWORK 1 (6.2)
WORLD RADIO NETWORK 2 (6.8)
WPCE-AM, Portsmouth-Norfolk, VA—inspirational music format; National Black Network affiliate (7.38)
TR—7 **WFMT-FM,** Chicago, IL—fine arts/classical radio (6.3/6.48 discrete stereo)
YESTERDAY USA SUPERSTATION—nostalgia radio programming format (6.8)
TR—11 **STANDARD NEWS** (6.12)
TR—17 **CNN RADIO NOTICIAS**—CNN Spanish language radio feed (7.56)
TR—18 **WSM-AM,** Nashville, TN—country & western music format (7.38/7.56 dicrete stereo) (part-time)
WWTN-FM, Manchester, TN—news, talkradio format (7.38)(part-time)
TR—21 **SUPERAUDIO-AMERICA'S COUNTRY FAVORITES**—country music format (5.04/7.74 discrete stereo)
SUPERAUDIO-SOFT HITS—soft rock hit radio format (5.22/5.4 discrete stereo)
SUPERAUDIO-SOFT SOUNDS—easy listening, big band music format (5.58/5.76 discrete stereo)
SUPERAUDIO-LIGHT 'N LIVELY ROCK—adult contemporary music format (5.94/6.12 discrete stereo)
SUPERAUDIO-CLASSICAL COLLECTIONS—classical music format (6.3/6.48 discrete stereo)
SUPERAUDIO-NEW AGE OF JAZZ—new age-jazz music format (7.38/7.56 discrete stereo)
SUPERAUDIO-CLASSIC HITS—golden oldies format (8.10/8.28 discrete stereo)
TR—22 **CNN HEADLINE NEWS RADIO NETWORK** (7.56)

HUGHES SBS 5 (Ku) (123°W)

Polarization: 43 Mhz/1-10—Horizontal
110Mhz/11-14—Vertical

43 MHZ TRANSPONDERS:

TR—1 **COMSAT VIDEO ENTERPRISES-SATELLITE CINEMA 3** (lower half transponder) (fully encrypted/S-A BMAC)
COMSAT VIDEO ENTERPRISES-SATELLITE CINEMA 1 (upper half transponder) (fully encrypted/S-A BMAC)
TR—4 **COMSAT VIDEO ENTERPRISES-SATELLITE CINEMA 4** (lower half transponder) (fully encrypted/S-A BMAC)
COMSAT VIDEO ENTERPRISES-SATELLITE CINEMA 2 (upper half transponder) (fully encrypted/S-A BMAC)
TR—8 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—10 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
EDJ SATELLITE NETWORK—Edward D. Jones & Co. private business television network (fully encrypted/S-A BMAC)

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WESTSAT COMMUNICATIONS

WMTV (Wal-Mart Television Network)—Wal-Mart Stores, Sams Club private business television network (fully encrypted/GI VIDEOCIPHER II)
LUCKY SATELLITE NETWORK—Lucky Stores private business television network (5.5)(video inverted)
VON'S SATELLITE NETWORK—Von's Stores private business television network (6.2)(Video encrypted/MACROVISION STARSHAKER)
AMERICAN DRUG STORES SATELLITE NETWORK—American Drug Stores private satellite network (5.5)(video encrypted/SAVE)
PHAR-MOR SATELLITE NETWORK—Phar-Mor Drug Stores private business television network (fully encrypted/S-A BMAC)
SBS5 ID CHANNEL (6.2/6.8) (part-time transmission)

110 MHZ TRANSPONDERS:

TR—12 **WNMB/RUSSIAN-AMERICAN TV**—Russian heritage variety & entertainment programming (5.41) (video inverted) (lower half transponder format)

TR—13 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
KENTUCKY STATE LOTTERY (6.2/6.8)
TRI-STATE LOTTERY—Maine-Vermont-New Hampshire combined lottery (6.2/6.8)
HP-VBS (Hewlett-Packard Video & Broadcast Services)—Hewlett Packard private business television network (part-time encrypted/S-A BMAC)
SUN MICROSYSTEMS—Sun Microsystems private business television network (part-time encrypted/S-A BMAC)
NSN (Newspaper Satellite Network)—ongoing management training for the newspaper industry (6.2/6.8)
KBTV (Kodak Broadcast Television)—Kodak private business television network (fully encrypted/S-A BMAC)
DVN (Digital Video Network)—DEC internal teleconferece network (fully encrypted/S-A BMAC)

TR—14 **WNMB/RUSSIAN-AMERICAN TV**—Russian heritage variety & entertainment programming (5.41)(video inverted)

Subcarrier Audio Services on SBS 5

TR—12 **RUSSIAN-AMERICAN RADIO NETWORK** (6.2)
TR—14 **RUSSIAN-AMERICAN RADIO NETWORK** (6.2)

SCPC Audio Services on SBS 5

TR—2 **WAL-MART/SAM'S CLUB INSTORE AUDIO NETWORK** (11752.20/11754.20/11763.00/11763.40/11763.80)
RUSSIAN-AMERICAN RADIO NETWORK (12090.25)

HUGHES GALAXY 9 (123°W)

Polarization: ODD—Vertical
EVEN—Horizontal

TR—1 **GLOBAL ACCESS TELECOM SERVICES**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
CALIFORNIA STATE LOTTERY (6.2/6.8)
LOUISIANA STATE LOTTERY (6.2/6.8)

TR—2 **GLOBAL ACCESS TELECOM SERVICES**—occasional transmissions: sports events, news & network feeds (6.2/6.8)

TR—3 **NHK TELEVISION NETWORK**—occasional news feeds (6.2/6.8)

TR—5 **GLOBAL ACCESS TELECOM SERVICES**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
RISING TIDE—GOP-TV Thursday evening Republican party issues/discussion (6.2/6.8)

TR—6 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

TR—7 **TVN ENTERTAINMENT**—digital video testing (digital video/GI DIGICIPHER MCPC)

TR—9 **TVN ENTERTAINMENT**—digital video testing (digital video/GI DIGICIPHER MCPC)

TR—10 **TVN ENTERTAINMENT**—digital video testing (digital video/GI DIGICIPHER MCPC)

TR—11 **TVN ENTERTAINMENT**—digital video testing (digital video/GI DIGICIPHER MCPC)

TR—13 **GRTV** (Guthy-Renker TV)—infomercial shop-at-home service (6.2/6.8)

TR—14 **SUNDANCE CHANNEL**—motion pictures from independent filmakers (fully encrypted/GI VIDEOCIPHER II)

continued on next page

TR—15 **SHOWTIME** (West)—first-run movies & entertainment specials (fully encrypted/GI VIDEOCIPHER II)
TR—17 **NICKELODEON/NICK-AT-NITE** (West)—premium children's programming (fully encrypted/GI VIDEOCIPHER II)
TR—18 **THE MOVIE CHANNEL** (West)—24 hr/day first run movie service (fully encrypted/GI VIDEOCIPHER II)
TR—19 **MTV** (Music Television)(West)—pop/rock music videos (fully encrypted/GI VIDEOCIPHER II)
TR—21 **GLOBAL ACCESS TELECOM SERVICES**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
TR—22 **GLOBAL ACCESS TELECOM SERVICES**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
TR—23 **CTVN** (Computer Television Network)—computer industry news, product reviews & instruction (6.2/6.8)

ATT TELSTAR 303 (120°W) inclined orbit satellite

Polarization: ODD—Vertical EVEN—Horizontal

TR—1V(1) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—1H(2) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—2V(3) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—2H(4) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—3V(5) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—3H(6) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—4V(7) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—4H(8) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—5V(9) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—5H(10) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—7V(13) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—7H(14) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—8H(16) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—9V(17) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—9H(18) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—10V(19) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—10H(20) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—11V(21) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds(6.2/6.8)
TR—11H(22) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds(6.2/6.8)
TR—12V(23) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—12H(24) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8

WESTSAT COMMUNICATIONS

ECHOSTAR 1 (DBS-Ku) (119°W)

Polarization: RH Circular

TR—1 thru 16: DISH NETWORK SERVICES (digital video-MPEG 2/DVB)

DISH NETWORK VIDEO/AUDIO PROGRAMMING SERVICES:

102 USA Network
104 Comedy Central
106 TV LAND
108 Lifetime Network
110 TVFOOD Network
112 HGTV
114 E! Entertainment Television
118 A&E
120 The History Channel
122 SCI-FI Channel
132 TNT
140 ESPN
142 ESPN 2
160 MTV
162 VH-1
166 Country Music Television
168 The Nashville Network
170 Nickelodeon
172 The Disney Channel
176 Cartoon Network
178 The Learning Channel
180 The Family Channel
182 The Discovery Channel
200 CNN
202 CNN Headline News
204 Court TV
206 CNN International/CNN Financial News
208 CNBC
210 C-SPAN
214 The Weather Channel
220 The Travel Channel
222 Home Shopping Network
226 QVC
230 TBS Superstation
232 KTLA (Los Angeles)
234 WPIX (New York)
240 WGN (Chicago)
241 NBC East-WNBC (New York)
242 NBC West-KNBC (Los Angeles)
243 CBS East-WRAL (Raleigh)
244 CBS West-KPIX (San Francisco)
245 ABC East-WJLA (Washington, DC)
246 ABC West-KOMO (Seattle)
247 FOX-TV
248 PBS
260 Trinity Broadcasting Network
261 Eternal Word Television Network
300 HBO East
301 HBO2 East
302 HBO3 East
303 HBO West
304 HBO2 West
310 Showtime East
311 Showtime West
312 Showtime 2
320 Cinemax
321 Cinemax 2
322 Cinemax West
330 The Movie Channel (East)
331 The Movie Channel (West)
401 The Golf Channel
500-505 Dish on Demand-PPV
600 RAI
602 Arab Radio-Television
604 Antenna Satellite
620 MTV Latino
626 Prime Deportiva
628 Telemundo
950 DISH CD-Young Country
951 DISH CD-Country Gold
952 DISH CD-Country Currents
953 DISH CD-Jukebox Gold
954 DISH CD-'70's Songbook
955 DISH CD-Adult Favorites
956 DISH CD-Adult Contemporary
957 DISH CD-Album Adult Alternative
958 DISH CD-Hitline
959 DISH CD-Classic Rock
960 DISH CD-Modern Rock
961 DISH CD-Hard Rock
962 DISH CD-Hip Hop
963 DISH CD-Urban Beat
964 DISH CD-Latin Styles
965 DISH CD-Fiesta Mexicana
966 DISH CD-EuroStyle
967 DISH CD-Mainstream Jazz
968 DISH CD-Contemporary Jazz Flavors
969 DISH CD-Expressions
970 DISH CD-Contemporary Instrumentals
971 DISH CD-Symphonic Classical
972-DISH CD-Light Classical
973-DISH CD-Beautiful Music
974-DISH CD-Mature Vocals
975-DISH CD-Contemporary Christian
976-DISH CD-Children's

MORELOS 2 (C/Ku)(116.8°W)

Polarization: C-Band (36 Mhz)—Vertical
C-Band (72 Mhz)—Horizontal
Ku-Band (108 Mhz)—Horizontal

C-BAND/36 MHZ TRANSPONDERS:

TR—4N(8) **XHGC,** Mexico City—Televisa La Super Cadena (6.2)
TR—5N(10) **SEP CULTURA** (Secretaria Education de Publica), Mexico City—national educational/cultural programming service (6.2)
TR—7N(14) **XEW-TV,** Mexico City—Televisa network flagship station (6.2)
TR—8N(16) **SEP EDUSAT**—national distance learning network for schools (6.2)
TR—9N(18) **CLARA VISION**—Catholic religious features & entertainment programming (6.2)
TR—11N(22) **TV AZTECA-CANAL 7**—youth-oriented variety action & sports programming (6.2)
TR—12N(24) **TV AZTECA-CANAL 13**—variety entertainment & sports programming (6.2)

C-BAND/72 MHZ TRANSPONDERS:

TR—3W(11) **XEIPN,** Mexico City—programming from Institute Politecnico National (6.2)(upper half transponder)
TR—4W(15) **TELEVISION POR CABLE**—Cable TV, variety & entertainment service for Mexico (upper half transponder) (digital video/GI DIGICIPHER)
TR—5W(17) **EDUCACION INTERACTIVA POR SATELITE**—interactive education courses from Technologico de Monterrey (6.2) (lower half transponder)
TR—6W(21) **MULTIVISION** (digital video/GI DIGICIPHER)
TR—6W(23) **MULTIVISION** (digital video/GI DIGICIPHER)

Subcarrier Audio Services on MORELOS 2

TR—7N(14) **XEX-AM,** Mexico City—popular music & variety programming (7.4)

TELESAT ANIK C3 (Ku) (114.9°W)

inclined orbit satellite

Polarization: T-1-T16: Vertical
T17-T32: Horizontal
(W)—Western Beam
(E)—Eastern Beam

NO VIDEO

TELECOM SOLIDARIDAD 2 (113°W) (C/Ku)

Polarization: C-Band (36Mhz)—Vertical
C-Band (72Mhz)—Horizontal
KuBand: 1K-8K: Horizontal
KuBand: 9K-16K: Vertical

C-BAND/36 MHZ TRANSPONDERS:

TR—3N(5) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2)

C-BAND/72 MHZ TRANSPONDERS:

TR—3W10) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2)

KU-BAND/54 MHZ TRANSPONDERS:

NO VIDEO

Polarization:
C-Band/ODD—Horizontal
C-Band/EVEN—Vertical
KuBand/T1-T16—Vertical
KuBand/T17-T32—Horizontal
(N)—National Beam
(CB)—Cross Border

TELESAT ANIK E1 (C/Ku)(111.1°W)

C-BAND/36 MHZ TRANSPONDERS:

TR—7B(14) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

TR—8B(16) **CTV TELEVISION NETWORK/RED NET**—regularly scheduled network programming (digital video/S-A MPEG 2-ch 201)

CTV TELEVISION NETWORK/BLUE NET—regularly scheduled network programming (digital video/S-A MPEG 2-ch 202)

CTV TELEVISION NETWORK/GREEN NET—regularly scheduled network programming (digital video/S-A MPEG 2-ch 203)

TR—10B(20) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

KU-BAND/27 MHZ TRANSPONDERS:

TR—T6(N) **NOVANET**—audio subcarrier services only-see below

Subcarrier Audio Services on ANIK E1 (Ku-Band)

TR—T6(N)
SAFEWAY INSTORE NETWORK (.945)
AOR AUTOMATION MUSIC (1.035)
BROADCAST NEWS (2.445)
CTV RADIO NETWORK (2.715)
TORONTO BLUE JAYS RADIO NETWORK (2.535)
BIG B DRUGSTORES NETWORK (3.255)
CANADIAN TIRE NETWORK (3.435)
STANDARD BROADCAST NEWS (3.525)

Polarization:
C-Band (36Mhz)—Vertical
C-Band (72Mhz)—Horizontal
KuBand: 1K-8K: Horizontal
KuBand: 9K-16K: Vertical

TELECOMM SOLIDARIDAD 1 (109.2°W) (C/Ku)

C-BAND/36 MHZ TRANSPONDERS:

TR—2N(3) **TELECOMM**—SCPC audio services only-see below
TR—3N(5) **OCCASIONAL TRANSMISSION**—sports events, news & network feeds (6.2)
TR—4N(7) **XEQ-TV,** Mexico City—Televisa network affiliate (6.2)
TR—5N(9) **MULTIVISION** (digital video/GI DIGICIPHER)
TR—6N(11) **MULTIVISION** (digital video/GI DIGICIPHER)
TR—7N(13) **MULTIVISION** (digital video/GI DIGICIPHER)
TR—8N(15) **MULTIVISION** (digital video/GI DIGICIPHER)
TR—9N(17) **MULTIVISION** (digital video/GI DIGICIPHER)

C-BAND/72 MHZ TRANSPONDERS:

TR—3W(10) **GOBIERNO DE LA REPUBLICA**—Presidential actualities news release service (6.2)
TR—6W(22) **OCCASIONAL TRANSMISSION**—sports events, news & network feeds (6.2)
CALIENTE GREYHOUND RACING—live closed-circuit horse racing from Caliente Greyhound Park racetrack (6.2)
CALIENTE JAI ALAI—live closed-circuit jai alai matches from Tijuana, Mexico (6.2)

KU-BAND/54 MHZ TRANSPONDERS:

NO VIDEO

Subcarrier Audio Services on SOLIDARIDAD 1

TR—3N(5) **RADIO ACIR** (6.8)

SCPC Audio Services on SOLIDARIDAD 1

TR—2N(3) **RADIODIFUSION VIA SATELITE** (59.60)
RADIO UNO (61.10/61.70 stereo)
INSTITUTO MEXICANO DE LA RADIO (66.50/66.75 stereo)
STEREOREY/CH-1 (67.79)
STEREOREY/CH-2 (68.09)
STEREOREY/OCCASIONAL AUDIO (67.50)
XEJP-FM, Mexico City–Radiomil (68.32/68.56 stereo)
EL HERALDO DE COMERCIO/CH 1, Monterey (69.05)
XEJP-FM, Mexico City–Radio Centro (71.38)
ORG IMPULSORA DE RADIO, (71.625)
RADIOFUSORAS ASOCIADAS (71.85)
XEOY-AM, Mexico City–Formento de la Radio (72.125)
EL HERALDO DE COMERCIO (72.50
RADIO CENTRAL DE MEXICO (RPM) (73.00)
RADIO SINFONIA (INFORJAL) (77.50)
RADIO IMPUSORA HERDEZ (81.00)
INFORJAL (87.70)

TELESAT ANIK E2(C/Ku)(107.3°W)

Polarization:
C-Band/ODD—Horizontal
C-Band/EVEN—Vertical
KuBand/T1-T16—Vertical
KuBand/T17-T32—Horizontal
(W)—Western Beam
(E)—Eastern Beam
(N)—National Beam
(CB)—Cross Border Beam

C-BAND/36 MHZ TRANSPONDERS:

TR—1A(1) **CBMT,** Montreal—CBC English Network station (Eastern time zone feed) (6.8)
TR—1B(2) **TSN** (The Sports Network)—24 hr/day sports programming (fully encrypted/TV-COM ORION)
TR—2B(4) **CHCH-TV,** Hamilton, Ontario—Toronto-area independent station (digital video/S-A SCPC)
CFTM-TV, Montreal, Quebec—TVA network French language variety & entertainment-programming (digital video/S-A SCPC)
CFCF-TV, Montreal, Quebec—CTV network affiliate (digital video/S-A SCPC)
WUHF, Rochester, NY—Fox network affiliate (digital video/S-A SCPC)
CITY-TV, Toronto, Ontario—independent station; variety & entertainment programming (digital video/S-A SPC)
CFMT-TV, Toronto, Ontario—ethnic variety & entertainment programming (digital video/S-A SCPC)
CHAN/BCTV (British Columbia Television),Vancouver,B.C.—British Columbia's leading CTV Network station (digital video/S-A SCPC)
CITV-TV, Edmonton, Alberta—Alberta's leading independent station (digital video/S-A SCPC)
KCTS, Seattle, WA—PBS network affiliate (digital video/S-A SCPC)
KSTW, Tacoma, WA—CBS network affiliate (digital video/S-A SCPC)
KOMO-TV, Seattle, WA—ABC network affiliate (digital video/S-A SCPC)
KING-TV, Seattle, WA—NBC network affiliate (digital video/S-A SCPC)
KCPQ, Seattle, WA—FOX network affiliate (digital video/S-A SCPC)
KIRO-TV, Seattle, WA—independent station (digital video/S-A SCPC)
KARE, Minneapolis, MN—NBC network affiliate (digital video/S-A SCPC)
WCCO-TV, Minneapolis, MN—CBS network affiliate (digital video/S-A SCPC)
WHDH-TV, Boston, MA—NBC network affiliate (digital video/S-A SCPC)
WGBH-TV, Boston, MA—PBS network affiliate (digital video/S-A SCPC)
WBZ-TV, Boston, MA—CBS network affiliate (digital video/S-A SCPC)
WCBV-TV, Boston, MA—ABC network affiliate (digital video/S-A SCPC)
WXYZ-TV, Detroit—ABC network affiliate (digital video/S-A SCPC)
WDIV-TV, Detroit—NBC network affiliate (digital video/S-A SCPC)
WTVS-TV, Detroit—PBS network affiliate (digital video/S-A SCPC)
WTOL-TV, Toledo, OH—CBS network affiliate (digital video/S-A SCPC)
CFJP-TV, Montreal, Quebec—TQS network affiliate (digital video/S-A SCPC)
TR—3B(6) **CBC NEWSWORLD**—CBC 24 hr/day all-news & information service (fully encrypted/TV-COM ORION)
TR—4A(7) **CBC OCCASIONAL TRANSMISSIONS**—occasional incoming/outcoming affiliate feeds (6.8)
TR—4B(8) **GLOBAL TV NETWORK**—regularly scheduled network programming (Eastern time zone feed (video encrypted/LEITCH) (5.8/6.2 stereo, 6.8 mono)
TR—5A(9) **CBC NORTH**—CBC network programming (Atlantic time zone feed) (6.12/6.8)
TR—5B(10) **CANCOM DIGITAL VIDEO SERVICES**—see TR-2B(4)
TR—6A(11) **RADIO CANADA**—French language CBC programming (Eastern time zone feed) (6.8/7.56)
TR—6B(12) **CANCOM DIGITAL VIDEO SERVICES**—see TR-2B(4)
TR—7A(13) **CBC NORTH**—CBC network programming (Pacific time zone feed) (6.8)
TR—7B(14) **CANCOM DIGITAL VIDEO SERVICES**—see TR-2B(4)
TR—8A(15) **5DTV**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
INTERNATIONAL TIMEKEEPERS—Sunday evening antique watches shop-at-home service (6.2/6.8)
TR—8B(16) **OCCASIONAL TRANSMISSIONS**—digital (2 channels S-A SCPC)
TR—9A(17) **CBC OCCASIONAL TRANSMISSIONS**—occasional incoming/outcoming affiliate feeds (6.8)
TR—9B(18) **VCC** (Video Catalog Channel)—shop-at-home service (6.8)
TR—10A(19) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
ASSINIBOIA DOWNS HARNESS RACING—live closed-circuit harness racing from Assiniboia Downs race track (6.2/6.8)
WINDSOR HARNESS RACING—live closed-circuit harness racing from Windsor race trace (6.2/6.8)
TR—10B(20) **XXXTREME TV**—uncensored "XXX-rated" adult features and movies (fully encrypted/GI VIDEOCIPHER II)
TR—11B(22) **XXXOTICA TV**—uncensored "XXX-rated" adult features and movies (fully encrypted/GI VIDEOCIPHER II)
TR—12A(23) **CBC OCCASIONAL TRANSMISSIONS**—occasional incoming/outcoming affiliate feeds (6.8)
TR—12B(24) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

continued on next page

WESTSAT COMMUNICATIONS

KU-BAND/27 MHZ TRANSPONDERS:

TR—T4(W) **MUCH MUSIC**—pop/rock videos (5.41/6.17 discrete stereo)
TR—T9(W) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (5.41/6.17)
BC LEGISLATURE—live coverage of British Columbia Legislature proceedings (5.41/6.17)
NORTHLANDS PARK HARNESS RACING—live closed-circuit harness racing from Northlands Park race track (5.41/6.17)
TR—T10(W) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (5.41/6.17)
STAMPEDE PARK HORSE RACING—live closed circuit horse racing from Stampede Park race track (6.2/6.8)
QUEENSBURY PARK HARNESS RACING—live closed circuit horse racing from Queensbury Park race track (6.2/6.8)
TR—T11(W) **SHOWCASE TELEVISION** (Mountain)—variety fiction programming (5.41 mono, 5.76/5.94 discrete stereo)
TR—T12(W) **SCN** (Saskatchewan Communications Network) (digital video/TV COM)
TR—T16(W) **KNOWLEDGE NETWORK**—educational programming network for British Columbia (5.76/5.94 discretete stereo 5.41 mono)
TR—T17(N) **DISCOVERY**—natural sciences documentary programming (5.76/5.94 discrete stereo) (video encrypted/TV-COM ORION)
TR—T19(N) **BRAVO!**—performing & cultural arts programming (5.41/6.17 stereo)
TR—T20(N) **LIFE NETWORK**—health/lifestyle programming for women (5.41 mono, 5.76/5.94 discrete stereo)
TR—T23(E) **SHOWCASE TELEVISION** (East)—variety fiction programming (5.41 mono, 5.76/5.94 discrete stereo)
TR—T24(E) **LEGISLATURE ASSEMBLY OF ONTARIO TELEVISION SERVICE** (5.41-English, 6.0-French)
TR—T25(E) **TFO** (Television Francophone Ontario) (5.76 & 5.94 discrete stereo/5.41 mono)
TR—T26(E) **TVO** (TV Ontario) (5.41)
TR—T29(E) **ASN** (Atlantic Satellite Network)(5.41)
TR—T31(E) **CBC NEWSWORLD**—incoming newsfeeds backhaul circuit (5.41/6.17)

Subcarrier Audio Services on ANIK E2 (C-Band)

TR—1A(1) **CBF-FM,** Montreal, Quebec—SRC French language news, information & music (5.4/5.58 discrete stereo)
CBC OCCASIONAL AUDIO (5.76)
CBM-AM, Montreal, Quebec—CBC Radio English network station (6.12)
SRC OCCASIONAL AUDIO (7.38)
TR—1B(2) **INTERSTATE RADIO NETWORK** (5.22)
CUE NETWORK—syndicated radio programming distribution (5.4/5.58 discrete stereo)
CILQ-FM, Toronto, Ontario—adult oriented rock format (5.76/5.94 stereo)
CINC-FM, Thompson, Manitoba—contry & western format (6.435)
BRN (Business Radio Network)—business issues call-in talkradio format (7.425)
CJAD-AM, Montreal, Quebec—news, talkradio format; Canadiens hockey (6.525)
ONE-ON-ONE SPORTS RADIO NETWORK—call-in sports talkradio format (7.515)
THE PUNJABI CHANNEL—Sikh Hindu religious programming (7.605)
CHIN-AM, Toronto, Ontario—multilingual popular music & informational programming (7.875)
TR—3B(6) **CBC RADIO** (East) (5.4 mono)
CBC RADIO (Atlantic) (5.58 mono)
CBC STEREO RADIO (East) (5.76/5.94 discrete stereo)
CBC STEREO RADIO (Atlantic) (6.12/6.3 discrete stereo)
VOICE PRINT—newspaper & bookreading service for the hearing-impaired (7.425)
CBC RADIO-EASTERN NWT SERVICE (7.56)
TR—6A(11) **SRC RADIO** (5.58/5.76)
TR—9B(18) **WOKI-FM,** Knoxville, TN—country & western format (6.2)

continued on next page

SCPC Audio Services on ANIK E2 (C-Band)

TR—1A(1)	**CBC RADIO-EAST ARCTIC SERVICE** (54.00)
TR—4A(7)	**CBC RADIO-EAST ARCTIC SERVICE** (54.00)
TR—6A(11)	**SRC** (East) (54.00)
	CBC RADIO-YUKON SERVICE (54.50)
TR—7A(13)	**CBC RADIO-MACKENZIE SERVICE** (54.00)
TR—8A(15)	**CBC RADIO-EAST ARCTIC SERVICE** (54.00)
TR—9A(17)	**CBC RADIO-NWT SERVICE** (Mountain) (54.00)
	CBC RADIO-QUEBEC-MARITIMES SERVICE (54.50)
TR—9A(19)	**CBC RADIO** (54.00)

Subcarrier Audio Services on ANIK E2 (Ku-Band)

TR—T16(W)	**SANGEET SAGAR**—multilingual all-cutural music from the Indian Subcontinent (6.12)
TR—T25(E)	**OCCASIONAL AUDIO** (6.435)
	OCCASIONAL AUDIO (6.525)
TR—T26(E)	**CJRT-FM,** Toronto, Ontario—classical, news format (5.76/5.94 discrete stereo)
	OJIBWAY RADIO-OJICREE—native language service for Northern Ontario (6.435)
	OJIBWAY RADIO-ENGLISH—native language service for Northern Ontario (6.525)

SCPC Audio Services on ANIK E2 (Ku-Band)

TR—T26(E)	**WAWATAY RADIO**—native language service for northern Ontario (12013.90)

GE GSTAR 4 (Ku) (105°W)

Polarization: 1—8: Horizontal
9—16: Vertical

TR—3 **CNN NEWSOURCE**—Cable News Network newsfeed service (fully encrypted/LEITCH)
TR—5 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
COURT TV CONTRACT CHANNEL—courtside-to-New York backhaul circuit (center/upper & lower half-transponder format)(6.2/6.8)
TR—6 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
THE TRAVELERS—The Travelers Insurance Co. private business television network (6.2/6.8)
TR—7 **CNN** (Cable News Network)—incoming newsfeeds contract channel (6.2/6.8)
TR—8 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
SVN (Sears Video Network)—Sears Roebuck Co. private business television network (fully encrytped/S-A BMAC)
K-MART—K-Mart stores private business television network (fully encrypted/S-A BMAC)
H-E-B SATELLITE NETWORK—H-E-Butt Grocery Co. private business television network (fully encrypted/S-A BMAC)
TR—11 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
IRSN—Internal Revenue Service internal teleconference network (6.2/6.8)
ABSAT—ABC affiliates newsfeeds (6.2/6.8)
TR—13 **CNN** (Cable News Network)—occasional transmissions: sports events, news & network feeds (6.2/6.8)
TR—15 **CNN** (Cable News Network)—incoming newsfeeds contract channel (6.2/6.8)
OCCASIONAL TRANSMISSIONS—sports events, news & network feeds (6.2/6.8)
TOWERNET—IDS Financial Services private business television network (fully encrypted/S-A BMAC)
CAT—Catepillar Corp. private business television network (fully encrypted/S-A BMAC)
TR—16 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
J C PENNEY TELEVISION NETWORK—J.C.Penney private business television network (fully encrypted/S-A BMAC)

SCPC Audio Services on GSTAR 4

TR—2 **FRANK'S NURSERY & CRAFTS AUDIO NETWORK** (11776.35/11776.60)

GE GSTAR 1 (Ku) (103°W)

Polarization: 1—8: Horizontal
9—16: Vertical

TR—3 **OCCASIONAL TRANSMISSIONS**—sport events, news & network feeds (6.2/6.8)
FXTV—Federal Express private business television network (fully encrypted/S-A BMAC)
NCR S-NET—NCR GIS private corporate network (fully encrypted/S-A BMAC)
TR—5 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—7 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
GRAMBLING STATE UNIVERSITY—distance learning telecourses (6.2/6.8)
TR—13 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

GE AMERICOM GE-1 (103°W) (C/Ku)

Polarization:
C-Band/ODD—Horizontal
C-Band/EVEN—Vertical
KuBand/ODD—Horizontal
KuBand/EVEN—Vertical

NOTE: GE-1 was successfully launched on 9-8-96 and has reached its final orbital position of 103°W. The satellite's Ku-Band transponders were scheduled to be activated on 10-1-96, with C-Band becoming operational on or about 10-15-96. Transponder assignments were not available at press time, however, satellite customers and programmers can be found in this issue's Transponder Hotline on page 2.

DBS-1 (DBS-Ku) (101.2°W)

Polarization: LH Circular

DIRECTV DBS-2/3 (DBS-Ku) (100.8°W)

Polarization: RH Circular

TR—1 thru 16: DIRECTV/USSB DBS DTH SERVICES (digital video/THOMPSON-RCA)

DIRECTV VIDEO/AUDIO PROGRAMMING SERVICES

100 Direct Ticket Previews
101 Special Events - PPV
104 - 175 Movies - PPV
180 Movies - PPV - Letterbox
188 Movies - PPV - Last Chance
189 Movies - PPV - Last Chance
191 Special Events PPV
195 Special Events PPV
196 Special Events PPV
200 Direct Ticket Previews
201 Customer Information
202 CNN
203 COURT TV
204 Headline News
205 Special Events Calendar
206 ESPN
207 ESPN (Alt)
208 ESPN 2
209 ESPN 2 (Alt)
210 Sports Schedule
212 TNT
213 Home Shopping Network
214 Home & Garden Television Network
215 El Entertainment Television
216 Much Music
217 Black Entertainment Television
219 American Movie Classics
220 Turner Classic Movies
221 A&E
222 The History Channel
223 The Disney Channel (E)
224 The Disney Channel (W)
225 The Discovery Channel
226 The Learning Channel (E)
227 Cartoon Network
229 USA Network (E)
230 TRIO
232 The Family Channel (E)
233 TBS Superstation
235 The Nashville Network
236 Country Music Television
240 Sci-Fi Channel
242 C-Span 1
243 C-Span 2
245 BLOOMBERG Information TV
246 CNBC
247 MSNBC
248 The Weather Channel
250 Newsworld International
252 CNN International
254 The Travel Channel
258 Bravo!
266 Independent Film Channel
268 Direct Ticket Previews
269 STARZ! (W)
270 STARZ! (E)
271 ENCORE 1 "HITS"
272 ENCORE 2 "LOVE STORIES"
273 ENCORE 3 "WESTERNS"
274 ENCORE 4 "MYSTERY"
275 ENCORE 5 "ACTION"
276 ENCORE 6 "TRUE STORIES & DRAMA"
277 ENCORE 7 "WAM" American Youth Ntwk
282 CBS - WRAL (Raleigh)
283 CBS-KPIX (San Francisco)
284 NBC - WNBC (New York)
285 NBC-KNBC (Los Angeles)
286 PBS - PBSNET
287 ABC - WJLA (Washington, DC))
288 ABC - KOMO (Seattle)
289 FOXNET
298 TV Asia
299 Retail/Dealer Channel
300 Sports Offers
301 Special Events Calendar
302 Sports Schedule
303 Newsport
304 The Golf Channel
305 Classic Sports Network
306 Speedvision
307 Outdoor Life
309 Sportschannel New England
310 Madison Square Garden
311 New England Sports Network
312 Sportschannel New York
313 Empire Sports Network
314 Sportschannel Philadelphia
315 Prime Sports KBL
316 Home Team Sports
317 SportsSouth Network
318 Sunshine Network
320 Pro Am Sports System
321 Sportschannel Ohio
322 Sportschannel Cincinnati
323 Sportschannel Chicago
324 Midwest Sports Channel
325 Prime Sports Southwest
326 Prime Sports Network
330 Prime Sports Northwest
331 Prime Sports West
332 Sportschannel Pacific
333-335 Alternate Sports Programming
336 DirecTV Sports Schedules
337-350 NFL SUNDAY TICKET
351-364 NBA LEAGUE PASS
365-374 NHL CENTER ICE
375-389 MLB EXTRA INNINGS
390-399 ESPN FULL COURT COLLEGE BASKETBALL
ESPN GAME PLAN COLLEGE FOOTBALL
400 Adult Specials
401 Spice
402 Playboy TV
501 Music Choice - Hit List
502 Music Choice - Dance
503 Music Choice - Rap
504 Music Choice - R&B Hits
505 Music Choice - Reggae
506 Music Choice - Blues
507 Music Choice - Jazz
508 Music Choice - Lite Jazz
509 Music Choice - New Age
510 Music Choice - Eclectic Mix
511 Music Choice - Alternative Rock
512 Music Choice - Metal
513 Music Choice - Classic Rock
514 Music Choice - The 80's
515 Music Choice - 70's Super Hits
516 Music Choice - Solid Gold Oldies
517 Music Choice - Soft Rock
518 Music Choice - Today's Country
519 Music Choice - Country Horizons
520 Music Choice - Classic Country
521 Music Choice - Easy Listening
522 Music Choice - Big Band
523 Music Choice - Singles & Standards
524 Music Choice - Showtunes
525 Music Choice - Classical Favorites
526 Music Choice - Classical Masterpieces
527 Music Choice - Contemporary Christian
528 Music Choice - For Kids Only
529 Music Choice - Sounds of the Season
530 Music Choice - Spectrum 1
531 Music Choice - Spectrum 2
550 Music Choice - Lite Classical (tba)
551 Music Choice - Easy Blend (tba)
552 Music Choice - Soft Album Mix (tba)
553 Music Choice - Trend (tba)
599 Music Choice - NRTC Radio (tba)
604 Galaxy in the Classroom
790 RealNet

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USSB VIDEO PROGRAMMING SERVICES:

900 Big Events Channel
910 Big Events Channel 2
960 TV Land
963 All News Channel
965 VH-1
967 Lifetime (E)
968 Nickelodeon/Nick-At-Night (E)
970 FLIX
971 Sundance Channel
973 Cinemax (E)
974 Cinemax 2
975 Cinemax (W)
977 The Movie Channel (E)
978 The Movie Channel (W
980 HBO (E)
981 HBO 2 (E)
982 HBO 3
983 HBO (W)
984 HBO 2 (W)
985 Showtime (E)
986 Showtime 2
987 Showtime (W)
989 MTV
990 Comedy Central (E)
999 Video Spotlight

Polarization: C-Band (36 Mhz/1-6) Vertical
C-Band (36 Mhz/7-12) Horizontal
C-Band (72 Mhz/13-15) Vertical
C-Band (72 Mhz/16-18) Horizontal
Ku-Band (72 Mhz) Horizontal

GE SPACENET 4 (C/Ku)(101°W)

C-BAND/36 MHZ TRANSPONDERS:

TR—4(7) **3BTV** (Basil Basset Bingo)—promotional direct satellite home bingo (6.2/6.8)
TR—6(11) **ENCORE 8-STARZ**—home satellite movie service (fully encrypted/GI VIDEOCIPHER II)
TR—7(2) **STARZ 2**—home satellite movie service (fully encrypted/GI VIDEOCIPHER II)
TR—8(4) **ENCORE** (West)—movie classics from the 60's-80's (fully encrypted/GI VIDEOCIPHER II)
TR—9(6) **KNBC-TV,** Los Angeles—NBC network affiliate (fully encrypted/GI VIDEOCIPHER II)
TR—10(8) **KOMO-TV,** Seattle—ABC network affiliate (fully encrypted/GI VIDEOCIPHER II)
TR—11(10) **FOX NET**—Fox Network white area service (fully encrypted/GI VIDEOCIPHER II)
TR—12(12) **HERO COMMUNICATIONS**—occasional transmissions; sports events, news & network feeds (6.2/6.8)

C-BAND/72 MHZ TRANSPONDERS:

TR—16L(14)) **NATIONAL PROGRAMMING NETWORK**—National Programming Service preview/promotional channel (6.2/6.8)
TR—16U(16) **NATIONAL PROGRAMMING NETWORK**—National Programming Service preview/promotional channel (6.2/6.8)
TR—17L(18) **STARZ!** (West)—Encore pay premium movie service (fully encrypted/GI VIDEOCIHPER II)
TR—18U(24) **KPIX,** San Francisco—CBS network affiliate (fully encrypted/GI VIDEOCIPHER II)

KU-BAND/72 MHZ TRANSPONDERS:

TR—24 **EMG** (Educational Management Group)—K-12 interactive distance learning (digital video/GI DIGICIPHER MCPC)(lower half transponder)
EMG (Educational Management Group)—K-12 interactive distance learning (digital video/TV COM MCPC) (upper half transponder)

Subcarrier Audio Services on SPACENET 4 (C-Band)

TR—18U(24) **TTC** (The California Channel)—live audio-only coverage of California State Assembly (6.8) proceedings (5.8)

HUGHES GALAXY 4 (C/Ku)(99°W)

Polarization: C-Band/ODD: Horizontal
C-Band/EVEN: Vertical
Ku-Band/54 Mhz: Vertical
Ku-Band/27 Mhz: Horizontal

C-BAND/36 MHZ TRANSPONDERS:

TR—1 **NPR SATELLITE SERVICES**—SCPC audio services only - see below
TR—2 **HUGHES COMMUNICATIONS**—SCPC audio services only - see below
TR—3 **NPR SATELLITE SERVICES**—SCPC audio services only - see below
TR—4 **HUGHES COMMUNICATIONS**—SCPC audio services only - see below
TR—5 **GLOBAL ACCESS TELECOM SERVICES**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
ACN (Adventist Communication Network)—Seventh Day Adventist teachings network (6.2/6.8)
TR—6 **SCN** (Shepherds' Chapel Network)—religious programming (6.2/6.8)
TR—7 **GLOBAL ACCESS TELECOM SERVICES**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
OPEN PUBLIC EVENTS NETWORK—North Carolina state government public affairs network (6.2/6.8)
TEXAS STATE LOTTERY (6.2 English/6.8 Spanish)
TR—8.1 **TELEMUNDO** (East)—spanish language variety programming/news network (digital video/S-A MPEG II)
8.2 **TELEMUNDO** (West)—spanish language variety programming/news network (digital video/S-A MPEG II)
8.3 **TELEMUNDO OCCASIONAL TRANSMISSIONS** (digital video/S-A MPEG II)
8.4 **TELENOTICIAS**—24 hr/day Hispanic-oriented newsbrief service (digital video/S-A MPEG II)
TR—9 **GLOBAL ACCESS TELECOM SERVICES**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
BOOK TV—recent-release book preview & promotion service (6.2/6.8)
CALIFORNIA STATE LOTTERY (6.2/6.8)
TR—10 **WJLA-TV,** Washington, DC—ABC network affiliate (fully encrypted/GI VIDEOCIPHER II)
TR—11 **GLOBAL ACCESS TELECOM SERVICES SYNDICATION CHANNEL** (6.2/6.8)
U.S. FARM REPORT—agriculture lifestyle news update (6.2/6.8)
OPEN PUBLIC EVENTS NETWORK—North Carolina state government public affairs network (6.2/6.8)
TR—12 **KEYSTONE COMMUNICATIONS**—occasional transmissions: sports events,news & network feeds (6.2/6.8)
OHIO STATE LOTTERY (6.2/6.8)
AGDAY—agriculture & farm news report (5.8/6.2 stereo, 6.8 mono)
TR—13 **THE SPACE CONNECTION**—occasional transmissions: sports events,news & network feeds (6.2/6.8)
TR—14 **WRAL-TV,** Raleigh-Durham, NC—CBS network affiliate (fully encrypted/Gi VIDEOCIPHER II)
TR—15 **WORLD HARVEST TELEVISION NETWORK**—religious (6.2/6.8)
TR—16 **CBS TELEVISION NETWORK - PACIFIC**—regularly scheduled network programming (Pacific time zone feed) (6.2/6.8 stereo) (video encrypted/GI VIDEOCIPHER 1B)
TR—17 **CBS TELEVISION NETWORK - SOUTHEAST**—regularly scheduled network programming (Eastern time zone feed) (6.2/6.8 stereo) (video encrypted/GI VIDEOCIPHER 1B)
TR—18 **CBS TELEVISION NETWORK**—occasional transmissions: sports events, news, & network & sydicated programming feeds (6.2/6.8)
MINNESOTA STATE LOTTERY (6.2/6.8)
TR—19 **CBS TELEVISION NETWORK - NORTHEAST**—regularly scheduled network programming (Eastern time zone feed) (6.2/6.8 stereo) (video encrypted/GI VIDEOCIPHER 1B)
TR—20 **CBS TELEVISION NETWORK - MIDWEST/SOUTHWEST**—regularly scheduled network programming (Eastern time zone feed) (6.2/6.8 stereo) (video encrypted/GI VIDEOCIPHER 1B)
TR—21 **CBS/WARNER BROS. SYNDICATION CHANNEL** (5.8/6.2 stereo, 6.8 mono)
THE WB TELEVISION NETWORK—regularly scheduled network programming (5.8/6.2 stereo, 6.8 mono)
ATS (Able Telecommunication Service)—religious programming (6.2/6.8)
WISCONSIN STATE LOTTERY (6.2/6.8)
MORNING AG REPORT—daily agricultural newsfeed service (6.2/6.8)
TR—22 **WNBC,** New York—NBC network affialiate (fully encrypted/GI VIDEOCIPHER II)
TR—23 **SCOLA**—multinational television newscast feed service (4 channels)(digital video/WEGENER SCPC)
TR—24 **CBS NEWSPATH**—regional/national newsfeeds (6.2/6.8)

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KU-BAND/27 MHZ TRANSPONDERS:

TR—1 **SPACECOM SYSTEMS/FM CUBED**—digital audio & data services
TR—4 **SPACECOM SYSTEMS/FM SQUARED**—audio subcarrier services—see below
TR—6 **CONVERGENT MEDIA SYSTEMS**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
VIDEO PLUS—occasional transmissions: sports events, news & network feeds (6.2/6.8)
AETNA TELEVISION NETWORK—Aetna Life & Casualty private business television network (digital video/GI DIGICIPHER SCPC)
NYLN (New York Life Network)—New York Life Insurance Co. private business television network (fully encrypted/S-A BMAC)
PG&E SATELLITE COMMUNICATIONS NETWORK—Pacific Gas & Electric private business television network (digital video/GI DIGICIPHER SCPC)
XEN—Xerox Corporation private business television network (digital video/GI DIGICIPHER SCPC)
XDU-NET (Xerox Document University)—Xerox training telecourses (digital video/GI DIGICIPHER SCPC)
ABTV (Allen-Bradley TV)—private business television network (digital video/GI DIGICIPHER SCPC)
EXCELEVISION SATELLITE NETWORK—Excell Telecommunications product sales, training and promotion (6.2/6.8)
NUTRITION FOR LIFE—health products promotion & marketing (6.2)
REXNET—Rexall products multilevel marketing & promotion (6.2/6.8)
SVTV (ShakleeVision TV)—Shaklee Co. products sales training/promotion (6.2/6.8)
GTV (Gwens TV)—Gwens stores private business television network (6.2/6.8)
FLEMING SATELLITE NETWORK—Fleming Foods private business television network (fully encrypted/TV-COM ORION)
SKYLINK—State Beauty Supply sales, training & promotion (6.2/6.8)
SCN (Satellite Communications Network)—Dayton-Marshall Fields-Hudsons private business television network (6.2/6.8)
CPS-TV—Carson Pirie Scott & Co. private business television network (6.2/6.8)
GRAND VALLEY STATE UNIVERSITY—distance learning education courses (6.2/6.8)
MITN (Michigan Instructional Telelvision Network)—Michigan state distance learning network (6.2/6.8)
MEIJER SATELLITE NETWORK—Meijer Co. private business television network (fully encrypted/S-A BMAC)
TR—7 **CTN** (Chinese Television Network)—24-hr/day chinese language news service from Hong Kong (6.8)
TR—10.0 **CNN AIRPORT CHANNEL**—CNN newsbrief service for airport passenger facilities (digital video/S-A SCPC)
TR—12 **CONVERGENT MEDIA SYSTEMS**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
HBN (Herbalife Broadcast Network)—Herbalife multilevel marketing sales training & promotion (6.2-Spanish/6.8-English)
ARMSTRONG MCCOLL SATELLITE NETWORK—beauty salon products sales, marketing & training (6.2/6.8)
ASN (Achievers Satellite Network)—Achievers Unlimited multilevel marketing sales, training & promotion (6.2/6.8)
NATIONWIDE SATELLITE NETWORK—Television & Appliance, Inc. private business television network (6.2/6.8)
MICROSOFT TV—Microsoft Corp. Business TV/users network (6.2/6.8)
MATOL SATELLITE NETWORK—Matol products information & sales training (6.2/6.8)
SAKS—Saks Fifth Avenue private business television network (fully encrypted S-A BMAC)
MCTV—Michcon Alignment private business television network (fully encrypted/S-A BMAC)
TR—13 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
FOX TV NEWS CONTRACT CHANNEL—network satellite newsgathering channel (6.2/6.8)
CHANNEL ONE/CLASSROOM CHANNEL—daily in-school newscast/current affairs service (6.4)
VIRGINIA STATE LOTTERY (6.2/6.8)

NSSN (NS Group Satellite Network)—telemarketing information programming service (6.2/6.8)
CHASEVISION—Chase Manhattan Bank private business television network (fully encrypted/S-A BMAC)
CTN (Civic Television Network)—communities & schools rebuilding continuing education network (6.2/6.8)
TEAMS DISTANCE LEARNING—middle school distance learning telecourses (6.2/6.8)C)
G-PTV—Georgia Pacific Corp. private business television network (fully encrypted/LEITCH)

HACNET (Hughes Aircraft Company)—private business television network (part-time encrypted/LEITCH)
NATIONWIDE SATELLITE NETWORK—Television & Appliance, Inc. private business television network (6.2/6.8)
FOSTER PARENT SCOPE—foster parents education seminars (6.2/6.8)
TR—15 **FORDSTAR**—Ford Motor Co. private business television network (digital video/GI DIGICIPHER MCPC)

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WESTSAT COMMUNICATIONS

TR—16 **MICROSPACE/FM SQUARED**—audio subcarrier services
TR—18 **JADE SATELLITE**—Cantonese language Chinese variety & entertainment programming from TVB Network, Hong Kong (6.2/6.8)
TR—21 **BAF COMMUNICATIONS**—occasional transmissions; sports events, news & network feeds (6.2/6.8)
AATV (Asian American Television)—Chinese variety & entertainment programming from the Republic of China, Taiwan, Hong Kong, Singapore and Korea (6.2/6.8)
WAUBONSEE COLLEGE—distance learning telecourses (6.2/6.8)
IN LENS VIEW—Inland Container private business television network (6.2/6.8)
ENN (Equitable News Network)—Equitable Insurance Co. private business television network (fully encrypted/S-A BMAC)
STEELCASE—Steelcase Corp. private business television network (fully encrypted/S-A BMAC)
TR—24 **TFC** (The Filipino Channel) variety & entertainment from ABS-CBN Broadcasting Corp. live direct from Manila (fully encrypted/TV COMM ORION)

KU-BAND/54 MHZ TRANSPONDERS:

TR—11L(51) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
MCI-TV—MCI Corporation private business television network (fully encrypted/S-A BMAC)
CHEVRON OIL SATELLITE NETWORK—Chevron Oil Co. priavate business television network (6.2/6.8)
BELLCORE TELETRAINING NETWORK—Bellcore Labs internal training education network (6.2/6.8)
TANDY SATELLITE NETWORK—Tandy Corporation private business television network (fully encrypted/S-A BMAC)
TR—11U(61) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
U.S. WEST—U.S. West private business television network (fully encrypted/SA/BMAC
STN—Schneider North America private business television network (part-time encrypted/S-A BMAC)
AMERICAN RED CROSS-BIOLINK—American Red Cross private business television network (fully encrypted/S-A BMAC)
MICHIGAN STATE UNIVERSITY—middle school distance learning courses (6.2/6.8)
CHEVRON PIPE LINE SATELLITE NETWORK—Chevron Pipe Line Co. private business television
UPLINC (Learning Information Network Communications)—Union Pacific Railroad Co. private business television network (part-time encrypted/S-A BMAC)
TR—17L **CBS TELEVISION NETWORK**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
TR—17C **CBS TELEVISION NETWORK**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
TR—17U **CBS TELEVISION NETWORK**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
TR—23L **CBS TELEVISION NETWORK**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
TR—23C **CBS TELEVISION NETWORK**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
MINNESOTA STATE LOTTERY—(6.2/6.8)
TR—23U **CBS NEWSPATH**—regional/national newsfeeds (6.2/6.8)

Subcarrier Audio Services on GALAXY 4 (C-Band)

TR—6 **KBVA-FM,** Bella Vista AR—variety music from 40's-80's (5.58/5.76 discrete stereo)
WCRP-FM, Guayama, PR—religious/educational format (6.53)
INSPIRATIONAL AUDIO MUSIC 1 (7.74)
INSPIRATIONAL AUDIO MUSIC 2 (7.92)
TR—15 **WHME-FM,** South Bend, IN—religious (5.58/5.76 discrete stereo)
WORLD HARVEST RADIO INTERNATIONAL—WHRI shortwave service (7.46/7.56)
WORLD HARVEST RADIO INTERNATIONAL-HAWAII—WHRI relay service (7.65)
TR—22 **WCNJ-FM,** Hazlet, NJ—various programming; Skylark Radio Network flagship (5.8)

SCPC Audio Services on GALAXY 4 (C-Band)

TR—1 **WHUR-FM**, Washington, DC—urban contemporary format (55.00)
SINO COMMUNICATIONS GROUP (56.20)
ASIA RADIO NETWORK USA/KBLA-AM, Los Angeles, CA—Korean language programming (56.40)

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WESTSAT COMMUNICATIONS

CHINESE MUSIC BROADCASTING (56.60)
WWRV-AM, New York, NY—religious programming from Radiovision Christiana (61.70)
K-NEWS, Beverly Hills, CA—all-news format (63.70)
KUSC-FM, Los Angeles, CA—PRI affiliate, classical music format (64.00/64.30 stereo)
NATIONAL PUBLIC RADIO NEWS NETWORK (71.90)
TR—2 **W. VIRGINIA METRO NEWS NETWORK** (77.40)
W. VIRGINIA METRO NEWS NETWORK/UNIV. W. VIRGINIA SPORTS (78.00)
VIRGINIA TECH SPORTS NETWORK (78.20)
TEXAS A&M BASKETBALL NETWORK (81.00)
OKLAHOMA NEWS NETWORK/OKLAHOMA ST. SPORTS (82.80)
TR—3 **OCCASIONAL AUDIO** (55.00)
KOA-AM, Denver, CO—news, talkradio format; Broncos, Nuggets, Rockets flagship (55.20)
SOUTH CAROLINA NETWORK/THE CITADEL SPORTS (56.00)
MINNESOTA PUBLIC RADIO (57.00/82.30 stereo)
WFMT FINE ARTS NETWORK/BEETHOVEN SATELLITE NETWORK (57.60/73.10 stereo)
KNOW-FM, Minneapolis-St. Paul, MN—NPR affiliate (57.90)
TEXAS A&M BASKETBALL NETWORK (61.00)
DENVER NUGGETS RADIO NETWORK (61.50)
OCCASIONAL AUDIO (62.00)
RADIO TALKING BOOK NETWORK-MINNESOTA—newspaper & book reading service for the sight-impaired (62.50)
MULTIMEDIA BROADCASTING NETWORK/SO. CAROLINA STATE NETWORK/ FURMAN UNIV. SPORTS/CLEMSON UNIV. SPORTS (62.70)
KRLD-AM, Dallas, TX—news, talkradio network (63.10)
TENNESSEE RADIO NETWORK (63.30)
GEORGIA NETWORK NEWS/GEORGIA STATE SPORTS (63.60)
SOUTHERN NEWS NETWORK/GEORGIA TECH SPORTS (63.80)
WHO-AM, Des Moines, IA—news, talkradio format (64.00)
KENTUCKY NEWS NETWORK (64.20)
PUBLIC RADIO INTERNATIONAL/MONITOR RADIO NETWORK (64.50)
FLORIDA PUBLIC RADIO NETWORK (64.90)
KENTUCKY RADIO NETWORK (Alternate) (65.30)
PUBLIC RADIO INTERNATIONAL/OCCASIONAL AUDIO (66.00/67.40 stereo)
PUBLIC RADIO INTERNATIONAL/MONITOR RADIO NETWORK (66.00)
FLORIDA'S RADIO NETWORKS—occasional audio, Florida State University sports, Car Clinic radio (66.70)
KOA NETWORK II (75.60)
WSB-AM, Atlanda, GA—all-news radio format (75.80)
MINNESOTA NEWS NETWORK (76.30)
TEXAS STATE NEWS NETWORK (76.60)
TEXAS STATE NEWS NETWORK/TEXAS A&M SPORTS (76.90)
MINNESOTA NEWS NETWORK/MINNESOTA TWINS//VIKINGS/NORTHSTARS/ TIMBERWOLVES RADIO NETWORK (77.10)
SOLDIERS SATELLITE NETWORK—U.S. Armed Forces variety entertainment service (77.40)
MRN (Motor Racing Network) (77.70)
WHO-AM, Des Moines IA—news, talkradio format (78.20)
WFAE-FM, Charlotte, NC—NPR affiliate (78.00)
ALABAMA NETWORK/AUBURN UNIV. SPORTS (78.40)
IN TOUCH—newspaper & book reading service for the sight-impaired (82.90)
KANSAS AUDIO READER NETWORK—newspaper & book reading service for the sight-impaired (84.00)
KENTUCKY NETWORK/UNIVERSITY OF KENTUCKY SPORTS (84.20)
KENTUCKY NETWORK (84.40)
BAYLOR UNIV. SPORTS (84.70)

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TR—4 **OCCASIONAL AUDIO** (52.50)
MID AMERICA NEWS NETWORK (52.90)
LOUISANA NETWORK/LOUISIANA TECH SPORTS (54.40)
MISSISSIPPI UNIV. SPORTS (54.70)
SO. MISSISSIPPI SPORTS/MISSISSIPPI STATE SPORTS (54.90)
MISSISSIPPI NETWORK (55.20)
LOUISIANA NETWORK (61.00)
WLAC-AM, Nashville, TN—news, talkradio format (61.20)
MULTICOMM/WESTAR—Utah Jazz Radio Net (secondary), NBA Radio Net (secondary), occasional audio (63.70)
MULTICOMM/WESTAR—New York Met Opera (left), Utah Jazz Radio Net (primary), NBA Radio Net (64.40)
MULTICOMM/WESTAR—New York Met Opera (right), occasional audio (76.00)
TR—6 **WCRP-FM,** Guayama, PR—religious/educational format (53.10)

Subcarrier Audio Services on GALAXY 4 (Ku-Band)

TR—24 **DZMM-AM,** Manila—ABS-CBN Broadcasting Network affiliate (6.8)

AT&T TELSTAR 401 (C/Ku) (97°W)

Polarization: C-Band/ODD: Vertical
C-Band/EVEN: Horizontal
Ku-Band/ODD: Vertical
Ku-Band/EVEN: Horizontal

C-BAND/36 MHZ TRANSPONDERS:

TR—1 **5DTV**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
EXXXTASY/TRUE BLUE PROMO CHANNEL (6.2/6.8)
TRURO HARNESS RACING—live closed-circuit harness racing from Truro race track (6.2/6.8)
TR—3 **KEYSTONE COMMUNICATIONS**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
SKYVISION—satellite pay programming shop-at home service (6.2/6.8)
OHIO STATE LOTTERY (6.2/6.8)
TR—4 **EYEMARK VIDEO SERVICES**—syndicated programming distribution service (5.8/6.2 stereo, 6.8 mono)
TURNERVISION PROMO CHANNEL (6.2/6.8)
TR—5 **KEYSTONE COMMUNICATIONS**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
IOWA STATE LOTTERY (6.2/6.8)
MISSOURI STATE LOTTERY (6.2/6.8)
TR—6 **BUENA VISTA TELEVISION SATELLITE NETWORK**—syndicated programming (6.2/6.8)
TR—7 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—8 **PBS-SCHEDULE X**—Public Broadcasting Service home satellite access channel (5.65 sap, 6.2/6.8 stereo)
TR—9 **FOX TELEVISION NETWORK**—sports events, news & network feeds (6.2/6.8)
TR—10 **FOX TELEVISION NETWORK**—network feeds (5.8 mono/6.2 & 6.8 left-right stereo)
TR—11 **ABC TELEVISION NETWORK-NET 4**—regularly scheduled network programming (Eastern time zone feed)(video encrypted/LEITCH) (6.2/6.8 stereo)
TR—12 **ABC TELEVISION NETWORK-NEWS ONE**—regional affiliates newsfeeds (6.2/6.8)
TR—13 **FOX TELEVISION NETWORK** (East/Central/Mountain/Hawaiian)(5.8 mono/6.2 & 6.8 left-right stereo)
TR—14 **FOX TELEVISION NETWORK**—network feeds (5.8 mono/6.2 & 6.8 left-right stereo)
TR—15 **TRUE BLUE**—24-hr/day uncensored "xxx-rated" adult features & movies (fully encrypted/GI VIDEOCIPHER II)
TR—16 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
PENNSYLVANIA STATE LOTTERY (6.2/6.8)

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TR—17 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

TR—18 **KEYSTONE COMMUNICATIONS**—occasional transmissions: sports events, news & network feeds (6.2/6.8)

NEWS IN MOTION—daily news graphics package service (6.2/6.8)

TR—19 **KEYSTONE COMMUNICATIONS**—occasional transmissions: sports events, news & network feeds (6.2/6.8)

UPN (United Paramount Network)—regularly scheduled network programming (5.8/6.2 stereo, 6.8 mono)

TR—20 **ABC TELEVISION NET-2**—regularly scheduled network programming (Eastern time zone feed) (video encrypted/LEITCH) (6.2/6.8 stereo)

TR—21 **ABC TELEVISION NET-1**—regularly scheduled network programming (Eastern time zone feed) (video encrypted/LEITCH) (6.2/6.8 stereo)

TR—22 **ABC TELEVISION NET-5**—regularly scheduled network programming (Pacific time zone feed) (video encrypted/LEITCH) (6.2/6.8 stereo)

TR—23 **ABC TELEVISION NET-3**—regularly scheduled network programming (Eastern time zone feed) (video encrypted/LEITCH) (6.2/6.8 stereo)

TR—24 **EXXXTASY** —uncensored "XXX-rated" adult features & movies (fully encrypted/GI VIDEOCIPHER II)

KU-BAND/54 MHZ TRANSPONDERS:

TR—3 **SCETV NETWORK**—South Carolina state distance learning network (7 channels) (digital video/GI DIGICIPHER MCPC)(lower half transponder)

SCETV NETWORK—South Carolina state public broadcasting network (6.2/6.8) (upper half transponder format)(offset freq: 11807 mhz)

TR—4 **NTU** (National Technological University)—Engineering MS degree distance learning telecourses (10-15 channels)(digital video/CLI SPECTRUM SAVER)

TR—5A.0 **PBS** (Public Broadcasting)-National Program Service—affiliate network programming (digital video/GI DIGICIPHER)

5A.5 **PBS** (Public Broadcasting)-Schedule B—affiliate network programming (digital video/GI DIGICIPHER)

5B.0 **PBS** (Public Broadcasting)—live events (digital video/GI DIGICIPHER)

5B.1 **PBS-SCHEDULE X**—Public Broadcasting Service home satellite access channel (digital video/GI DIGICIPHER)

5B.5 **READY-TO-LEARN 1**—distance learning (digital video/GI DIGICIPHER)

5B.6 **READY-TO-LEARN 2**—distance learning (digital video/GI DIGICIPHER)

TR—6 **PBS** (Public Broadcasting)—affiliate network programming (5.65 sap, 6.2/6.8 stereo) (offset freq:11855)(evenings & weekends)

GLOBAL ACCESS TELECOM SERVICES—occasional transmissions: sports events, news & network feeds (6.2/6.8)

SERC—distance learning high school telecourses (6.2/6.8)(upper & lower half transponder format) (offset freqs:11848 & 11878 mhz)(weekday)

NEBRASKA ETV NETWORK—foreign language distance learning telecourses (6.2/6.8) (lower half transponder)(offset freq: 11848 mhz)

TR—7 **NISS** (National Instructional Satellite Service)—distance learning telecourses (6.2/6.8) (lower half transponder format)(offset freq:11895 mhz)(weekdays)

PBS (Public Broadcasting)—affiliate network programming (5.65 sap, 6.2/6.8 stereo) (lower half-transponder format)(offset freq:11895)(evenings & weekends)

ITN WORLD NEWS—daily newsfeed distribution channel (6.2/6.8)(lower half transponder) (offset freq:11895)

PBS (Public Broadcasting)—educational services programming (6.2/6.8) (upper half transponder format)(offset freq:11925 mhz)

BLOOMBERG INFORMATION TELEVISION —daily feed distribution channel (6.2/6.8) (upper half transponder)(offset freq:11925 mhz)

TR—8 **PBS** (Public Broadcasting)—affiliate network programming (5.65 sap, 6.2/6.8 stereo)(offset freq 11915 mhz)

continued on next page

KU-BAND/27 MHZ TRANSPONDERS:

TR—9A(L) **EGYPTIAN SATELLITE CHANNEL**—variety & entertainment programming from Egypt (6.2/6.8)
TR—10A.1 **LOUISANA PUBLIC BROADCASTING**—Louisiana state public broadcasting service (digital video/GI DIGICIPHER)
10A.4 **LEHIGH UNIVERSITY**—distance learning telecourses (digital video/GI DIGICIPHER)
TR—11A(L) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)(offset freq 12016 mhz)
TR—11C **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)(offset freq 12040 mhz)
TAN (The Asia Network)—South Korea television variety programming (6.8)
SASKETCHEWAN WHEAT POOL—live cattle auction (6.2/6.8)
SSA NATIONAL SATELLITE NETWORK—Social Security Administration private business television network (6.2/6.8)(part-time encrypted/S-A BMAC)
PIONEER PUBLIC TV (6.2/6.8)
TR—11B(U) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8) (offset freq 12048 mhz)
TR—12A(L) **FPBN** (Florida Public Broadcasting Network)—occasional affiliate feeds, distance learning telecourses (6.2/6.8)
OCCASIONAL TRANSMISSIONS—occassional transmissions: sports events, news & network feeds (6.2/6.8)
TR—12B(U) **FPBN** (Florida Public Broadcasting Network)—occasional affiliate feeds, distance learning telecourses (6.2/6.8)
OCCASIONAL TRANSMISSIONS—occassional transmissions: sports events, news & network feeds (6.2/6.8)
TR—13 **SPECTRADYNE**—pay-per-view entertainment service for the lodging industry (12 channels) (digital video/CLI SPECTRUM·SAVER)
TR—14A(L) **GPTV-PEACHSTAR** (Georgia Public TV)—state distance learning network (6.2/6.8)
OCCASIONAL TRANSMISSIONS—sports events, news & network feeds (6.2/6.8)
TR—14B(U) **GPTV** (Georgia Public TV)—Georgia state public broadcasting service (digital video/GI DIGICIPHER)
TR—15A(L) **ABSAT**—incoming ABC-TV affiliate newsfeeds (6.2/6.8)
TR—15B(U) **ABSAT**—incoming ABC-TV affiliate newsfeeds (6.2/6.8)
TR—16A(L) **ABSAT**—incoming ABC-TV affiliate newsfeeds (6.2/6.8)
TR—16B(U) **ABSAT**—incoming ABC-TV affiliate newsfeeds (6.2/6.8)

Polarization: C-Band/ODD: Horizontal
C-Band/EVEN: Vertical
Ku-Band/All Circular

HUGHES GALAXY 3R (C/Ku)(95°W)

C-BAND/36 MHZ TRANSPONDERS:

TR—1 **TVN THEATERVISION-THEATER 1**—24hr/day first-run pay-per-view movies (fully encrypted/GI VIDEOCIPHER II)
TR—2 **TVN THEATERVISION-THEATER 2**—24hr/day first-run pay-per-view movies (fully encrypted/GI VIDEOCIPHER II)
TR—3 **TVN THEATERVISION-THEATER 3**—24hr/day first-run pay-per-view movies (fully encrypted/GI VIDEOCIPHER II)
TR—4 **TVN THEATERVISION-THEATER 4**—24hr/day first-run pay-per-view movies (fully encrypted/GI VIDEOCIPHER II)
TR—5 **TVN THEATERVISION-THEATER 5**—24hr/day first-run pay-per-view movies (fully encrypted/GI VIDEOCIPHER II)
TR—6 **TVN THEATERVISION-THEATER 6-TVN WIDESCREEN THEATER**—24hr/day first-run pay-per-view movies in widescreen letterbox format & suround sound (fully encrypted/GI VIDEOCIPHER II)
TVN PROMO CHANNEL (fully encrypted/GI VIDEOCIPHER II)
TR—7 **GRTV** (Guthy-Renker TV)—infomercial shop-at-home service (6.2/6.8)
TR—8 **TVN THEATERVISION-THEATER 8**—24hr/day first-run pay-per-view movies (fully encrypted/GI VIDEOCIPHER II)

continued on next page

TR—9 **TVN THEATERVISION-THEATER 9**—24hr/day first-run pay-per-view movies (fully encrypted/GI VIDEOCIPHER II)

TR—10 **ATV** (Adultvision)—adult-oriented, sexually explicit movies and entertainment specials (fully encrypted/GI VIDEOCIPHER II)

TR—11 **THE SPACE CONNECTION**—occasional transmissions: sports events, news & network feeds (6.2/6.8)

SUPERSTAR CONNECTION PROMO CHANNEL (6.2/6.8)

RIDEAU CARLETON HORSE RACING—live closed-circuit horse racing from Rideau Carleton race track (6.2/6.8

TR—12 **MCI COMMUNICATIONS**—occasional transmissions: sports events, news & network feeds (6.2/6.8)

RAI USA—Italian variety & entertainment programming live-direct from RAI, Rome (6.8)

SATELLITE CITY WIZARD CHANNEL—home satellite pay programming package shop-at-home service (6.2/6.8)

TR—13 **THE SPACE CONNECTION**—occasional transmissions: sports events, news & network feeds (6.2/6.8)

TRACSTAR—live closed-circuit horse/harness racing (didital video/GI DIGICIPHER SCPC)

TR—14 **THE SPACE CONNECTION**—occasional transmissions: sports events, news & network feeds(6.2/6.8)

WINDSOR HARNESS RACING—live closed-circuit horse racing from Windsor race track (6.2/6.8)

TR—15 **GOSPEL MUSIC TV**—gospel music videos (fully encrypted/GI VIDEOCIPHER II)

TR—16 **HBO 2** (East)—Home Box Office multiplexed service (fully encrypted/GI VIDEOCIPHER II)

TR—17 **HBO CINEMAX 2** (East)—Home Box Office Cinemax multiplexed service (fully encrypted/GI VIDEOCIPHER II)

TR—18 **UNIVISION**—occasional transmissions: sports events, news & network feeds (6.2/6.8)

TR—19 **HBO 3** (East)—Home Box Office multiplexed service (fully encrypted/GI VIDEOCIPHER II)

TR—20 **HBO 2** (West)—Home Box Office multiplexed service (fully encrypted/GI VIDEOCIPHER II)

TR—21 **UNIVISION CONTRACT CHANNEL**—incomming/outgoing newsfeeds circuit channel (6.2/6.8)

TR—22 **ROBERTS TV INTERNATIONAL**—live closed-circuit horse racing (digital video)

TR—23 **THREE ANGELS BROADCASTING**—religios (6.8)

TR—24 **ROBERTS TV INTERNATIONAL**—live closed-circuit horse racing (digital video)

KU-BAND/27 MHZ TRANSPONDERS:

NOTE: All GALAXY 3R KU-Band transponders currently allocated to Hispanic DBS service, GALAXY LATIN AMERICA. Usable downlink footprint coverage limited to Mexico, Central America and portions of South America.

GE GSTAR 3 (Ku) (93°W)

inclined orbit satellite

Polarization: 1—8: Horizontal
9—16: Vertical

TR—3 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

TR—4 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

TR—5 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

TR—6 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

TR—7 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

TR—9 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

TR—11 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

TR—12 **MAYO VIDEO COMMUNICATIONS**—Mayo Medical Clinic video conference network (lower & upper half transponder format) (fully encrypted/S-A BMAC)

TR—13 **MAYO VIDEO COMMUNICATIONS**—Mayo Medical Clinic video conference network (lower & upper half transponder format) (fully encrypted/S-A BMAC)

TR—14 **MAYO VIDEO COMMUNICATIONS**—Mayo Medical Clinic video conference network (lower & upper half transponder format) (fully encrypted/S-A BMAC)

TR—15 **GSTAR 3 ID CHANNEL** (6.8)

TR—16 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

Polarization:
C-Band/ODD: Horizontal
C-Band/EVEN: Vertical
Ku-Band/54 Mhz: Horizontal
Ku-Band/27 Mhz: Vertical

HUGHES GALAXY 7 (C/Ku)(91°W)

C-BAND/36 MHZ TRANSPONDERS:

TR—1 **SEGA CHANNEL**—on-demand interactive video game network (S-A digital data stream)
TR—2 **CBS TELEVISION NETWORK-PACIFIC**—regularly scheduled network programming (Pacific time zone feed) (6.2/6.8 stereo)(video encrypted/GI VIDEOCIPHER 1B)
TR—3 **ACTION PAY-PER-VIEW**—pay-per-view action & adventure movie service (fully encrypted/VIDEOCIPHER II)
TR—4 **FX TV** (East)—Fox TV variety & entertainment for cable tv distribution (6.8)
TR—5 **FX TV** (West)—Fox TV variety & entertainment for cable tv distribution (6.8)
TR—6 **GAME SHOW NETWORK**—classic network/syndicated game show programs (fully encrypted/GI VIDEOCIPHER II)
TR—7 **THE GOLF CHANNEL**—live/taped professional golf; golf instructional & discussion (6.8) (fully encrypted/GI VIDEOCIPHER II)
TR—8 **TURNER BROADCASTING**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
TR—9.0 **GROUP W NETWORK SERVICES** (digital video/GI DIGICIPHER)
9.1 **GROUP W SPORTS MARKETING**—Wisconsin Sports Network (digital video/GI DIGICIPHER)
9.6 **SPEEDVISION**—auto, boating & aviation instructional features and documentary programming (digital video/GI DIGICIPHER)
TR—10 **EDTV** (Emirates Dubai TV)—Arabic variety & entertainment programming live direct from Dubai TV Network (6.2/6.8)
TR—11 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8))
TR—12 **HOME SHOPPING NETWORK**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
ROMANCE CLASSICS—begins tba
TR—13.0 **KALEIDOSCOPE-AMERICAN DISABILITY**—specialized programming for the disabled & hearing impaired (digital video/GI DIGICIPHER)
13.1 **PRIME SPORTS SHOWCASE**—feature-length sports programming (digital video/GI DIGICIPHER)
13.3 **INTRO TELEVISION**—cable tv multi-programming service (digital video/GI DIGICIPHER)
13.4 **CLASSIC SPORTS NETWORK**—classic sports events, television series, specials & documentaries (digital video/GI DIGICIPHER)
TR—14 **IFC** (Independent Film Channel)—feature films/movies from independent filmakers (fully encrypted/GI VIDEOCIPHER II)
TR—15 **INTRO TELEVISION**—cable tv mutliprogramming service (fully encrypted/GI VIDEOCIPHER II)
TR—16 **ACCESS TV**—various informational programming (4 channels)(digital video/GI DIGICIPHER MCPC)
TR—17 **ESPN INTERNATIONAL**—24hr/day sports programming for South American distribution (fully encrypted/S-A BMAC)
TR—18 **CBS TELEVISION NETWORK**—occasional network sports events, news & network feeds (6.2/6.8)
MINNESOTA STATE LOTTERY (6.2/6.8)
TR—19 **CBS TELEVISION NETWORK**—regularly scheduled network programming (Eastern time zone feed) (6.2/6.8 stereo)(video encrypted/GI VIDEOCIPHER 1B)
TR—20 **FNC** (Fox News Channel)—begins 10-7-96
TR—21 **BET ON JAZZ: THE CABLE JAZZ CHANNEL**—jazz music variety & entertainment programming (6.2/6.8)
TR—22 **NEWSTALK TELEVISION**—live studio audience talkshows (6.2/6.8)
TR—23 **fXM** (Movies from Fox)—hit movies from Twentieth Century Fox studios (fully encrypted/GI VIDEOCIPHER II)
TR—24 **THE INTERNATIONAL CHANNEL**—variety & entertainment programming from international television networks (6.8) (fully encrypted/GI VIDEOCIPHER II)

KU-BAND/27 MHZ TRANSPONDERS:

TR—1 **TCI** (Telecommunications Inc.)—occasional transmissions; sports events, news & network feeds (6.2/6.8)
GTV TELEVISION NETWORK (Givens)—personal lifestyle advisory & informational programming service (6.2/6.8)
SCTN (Southern Company Television Network)—Southern Company private business television network (fully encrypted/S-A BMAC)
NATIONAL TELELEARNING NETWORK—crisis management conitunuing education telecourses for schools & communities (6.2/6.8)
TCI HITS (Headed-in-the-Sky)—begins 9-1-96

continued on next page

TR—3 **IHETS** (Indiana Higher Education Television Service)—Indiana state distance learning network (8 channels)(digital video/CLI SPECTRUM SAVER)

TR—4 **TCI** (Telecommunications Inc.)—occasional transmissions; sports events, news & network feeds (6.2/6.8)
TEXAS STATE LOTTERY (6.2 English/6.8 Spanish)
ISTN (Information Systems Television Network)—Vanstar instructional/information service for the computer industry (part-time encrypted/S-A BMAC)
ACHIEVEMENT TV—interactive videoconferences for students (6.2/6.8)
NEW ENGLAND TELE NET—The New England private business television network (fully encrypted/S-A BMAC)
TEXACO SATELLITE NETWORK—Texaco Oil Company private business television network (fully encrypted/S-A BMAC)
JCP&L (Jersey Central Business Television Network)— Jersey Central Power private business television network (6.2/6.8)
APTN (Alabama Power Television Network)—Alabama Power private business television network (fully encrypted/S-A BMAC)
ALLIANCE VISION—Alliance Co. products sales training/promotion (6.2/6.8)
TCI HITS (Headed-in-the-Sky)—begins 9-1-96

TR—7 **TCI HITS** (Headed-in-the-Sky)—begins 9-1-96
GE LIGHTING—GE Lighting Co. private business television network (fully encrypted/S-A BMAC)
PSBN (Power Systems Broadcast Network)—GE Power Systems private business television network (fully encrypted/S-A BMAC)

TR—9 **TCI HITS** (Headed-in-the-Sky)—begins 9-1-96

TR—10 **TCI** (Telecommunications Inc.)—occasional transmissions; sports events, news & network feeds (6.2/6.8)
RAN (Rockwell Automotive Network)—Rockwell Industries private business television network (fully encrypted/S-A BMAC)
TIB-TV—Texas Instrunents private business television network (fully encrypted/S-A BMAC)
AMERITECH LIBRARY NETWORK—computer networks education distance learning (6.2/6.8)
AMERICAN FINANCIAL SKYLINK—American Institute of Bankers/American Bankers Association continuing education network 6.2/6.8)(part-time encrypted/S-A BMAC)
PHTN (Public Health TV Network)—Center for Disease Control private business television network (6.2/6.8)
LOWE'S—Lowe's Companies private business television network (fully encrypted/S-A BMAC)
TCI HITS (Headed-in-the-Sky)—9-1-96

TR—12 **TCI** (Telecommunications Inc.)—occasional transmissions; sports events, news & network feeds (6.2/6.8)
CHANNEL COMMUNICATIONS NETWORK—Channel Home Improvement Centers private business television network (6.2/6.8)
TCI HITS (Headed-in-the-Sky)—9-1-96

TR—13 **TCI** (Telecommunications Inc.)—occasional transmissions; sports events, news & network feeds (6.2/6.8)
QSN (Quorum Satellite Network)—Quorum International telemarketing information service (6.2/6.8)
FOREVERVISION—Forever Living health products multilevel marketing, sales & promotion (6.2/6.8)
ALN (American Law Network)—ALI/ABA continuing legal education programming (6.2/6.8)
NOVELL SATELLITE DAYS—Novell Corp. private business television network (6.2/6.8)
HTV (Hospitality Television)—culinary arts training & informational programming for the hotel/lodging industry (fully encrypted/S-A BMAC)
ERNST SATELLITE NETWORK—Ernst stores private business television network (6.2/6.8)
NTV—Nissan Motors private business television network (fully encrypted/S-A BMAC)
TCI HITS (Headed-in-the-Sky)—9-1-96

TR—15 **TCI** (Telecommunications Inc.)—occasional transmissions; sports events, news & network feeds (6.2/6.8)
THE PFS ENTREPRENEURAL NETWORK —Primerica Financial Services private business television network (fully encrypted/S-A BMAC)
CHANNEL Z—Sylvan Learning Center private business television network (6.2/6.8)
TRANSAT—American Trucking Association private business television network (6.2/6.8)
RFS-NA—RFS Corp. private business television network (fully encrypted/S-A BMAC)
CSN (Church Satellite Network)—Fuller Evangelistic Association network (6.2/6.8)
THE COMPUTER CHANNEL—computer industry information service (part-time encrypted/S-A BMAC)
GE CAPITAL—GE Capital private business television network (fully encrypted/S-A BMAC)
OPMSN (Office of Personnel Management Satellite Network)—internal videoconference network (fully encrypted/S-A BMAC)
UM VIDEO NETWORK—University of Missouri distance learning telecourses (6.2/6.8)
TCI HITS (Headed-in-the-Sky)—9-1-96

TR—16 **VIDEO PLUS**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
TPN (The Peoples Network)—personal lifestyle advisory & informational programming service (6.2/6.8)
GEMS TV—GE Medical Systems private business television network (digital video/GI DIGICiPHER)

continued on next page

TIP-TV (Training in Partnership)—GE Medical Systems service training network (digital video/GI DIGICIPHER)

TR—18 **WESTCOTT COMMUNICATIONS**—private business television videoconference feeds network (digital video/CLI SPECTRUM SAVER)

TI-IN NETWORK—nationwide interactive education television network (4 channels) (digital video/CLI SPETRUM SAVER)

CHICO STATE UNIVERSITY SATELLITE NETWORK—computer/information system distance learning network (digital video/CLI SPECTRUM SAVER)

TR—19 **TCI** (Telecommunications Inc.)—occasional transmissions; sports events, news & network feeds (6.2/6.8)

OUTBACK STEAKHOUSE—OS private business television network (fully encrypted/S-A BMAC)

GPTN (Georgia Power Television Network)—Georgia Power private business television network (fully encrypted/S-A BMAC)

WASHINGTON INTERACTIVE TELEVISION—Social Services distance training television network (6.2/6.8)

DOW BROADCAST NETWORK—Dow Chemical private business television network (fully encrypted/S-A BMAC)

S.H. BLACK—S.H. Black private business television network (fully encrypted/S-A BMAC)

BCN (Business Council Network)—Alabama State business legislation news update/commentary (6.2/6.8)

U.S. LIBRARY OF CONGRESS BRAILLE NET—Braille trypography training (6.2/6.8)

TCI HITS (Headed-in-the-Sky)—9-1-96

TR—21 **TCI-TV**—Telecommunications Inc. private business television network (fully encrypted/S-A BMAC)

TR—22 **CLASSIC SPORTS NETWORK**—classic sports events, television series, specials & documentaries (NY-to-TCI backhaul circuit) (digital video/GI DIGICIPHER MCPC)

KU-BAND/54 MHZ TRANSPONDERS:

TR—14L(54) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

CSN (Chrysler Satellite Network)—Chrysler Corporation private business television network (fully encrypted/S-A BMAC)

LEXUS SATELLITE NETWORK—Lexus Motor Co. private business television network (fully encrypted/S-A BMAC)

GM SATELLITE NETWORK—General Motors private television network (fully encrypted/S-A BMAC)

HBTV (Home Base Television Network)—Home Base stores private business television network (fully encrypted/S-A BMAC)

FOCUS—Enron Operations Corp. private business television network (6.2/6.8)

VAN WATERS & ROGERS—Van Waters & Rogers Inc. private business televison network (6.2/6.8)

HOBART SATELLITE NETWORK—Hobart Food Service private business television network (6.2/6.8)

TR—14U(64) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

CDN (Chrysler Dealers Network)—Chrysler dealers private business television network (fully encrypted/S-A BMAC)

AAFES BTV—Army-Air Force Exchange Service private business television network (fully encrypted/S-A BMAC)

AIR FORCE SATELLITE NEWS—news service for Air Force installations (6.2/6.8)

BUILDERS SQUARE—Builders Square private business television network (6.2/6.8)

TR—17L **WESTCOTT COMMUNICATIONS** (digital video/CLI SPECTRUM SAVER)

LETN (Law Enforcement Television Network)—continuing education training courses for law enforcement officials (digital video/CLI SPECTRUM SAVER)

FETN (Fire & Emergency Television Network)—continuing education courses for firefighting and emergency response personnel (digital video/CLI SPECTRUM SAVER)

HSTN (Health & Science Television Network)—medical programming subscription service for hospitals (digital video/CLI SPECTRUM SAVER)

LTCN (Long Term Care Network)—programming for nursing homes and long term care institutions (digital video/CLI SPECTRUM SAVER)

continued on next page

TR—17U **WESTCOTT COMMUNICATIONS**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
ASTN (Automotive Satellite Television Network)—automobile dealership sales training (fully encrypted/S-A BMAC)
ANTN (Airport News & Training Network)—career enhancement training for aircraft personnel (6.2/6.8)
NATIONAL WEATHER NETWORKS—custom regional network weather forcast service (6.2/6.8)

Subcarrier Audio Services on GALAXY 7 (C-Band)

TR—10 **RADIO MARIA**—religious interactive format live-direct from Italy (5.8)
RADIO DUBAI—primary national radio network from Dubai, UAE (7.4)
RADIO MARIA—religious (8.0)
TR—14 **RAI RADIO NET**—Italian radio service (7.38)
AMERICAN FREEDOM NETWORK—call-in talkshow format (7.56)
TR—19 **WCBS-AM,** New York, NY—news & information radio format (7.4)

AT&T TELSTAR 402R (C/Ku) (89°W)

Polarization: C-Band/ODD: Vertical; C-Band/EVEN: Horizontal; Ku-Band/ODD: Vertical; Ku-Band/EVEN: Horizontal

C-BAND/36 MHZ TRANSPONDERS:

TR—1 **GRAFF PPV**—tba
TR—3 **GRAFF**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
TR—4 **SHOP-AT-HOME NETWORK**—shop-at-home service (6.2/6.8)
TR—5 **FOX TELEVISION NETWORK** (Pacific/Alaskan)(5.8 mono, 6.2 & 6.8 left-right stereo)
TR—6 **AUTOTOTE**—programming tba
XXXPLORE/XXXPOSE TV PROMO CHANNEL (6.2/6.8)
WINDSOR HARNESS RACING—live closed-circuit harness racing from Windsor race track (6.2/6.8)
TR—7 **CVS** (Cable Video Store)—24-hr/day first-run pay-per-view movies (fully encrypted/GI VIDEOCIPHER II)
TR—8 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
EL COMMANDANTE HORSE RACING—live closed-circuit horse racing from El Commandante race track (6.2/6.8)
TR—9 **BROADCAST SATELLITE INTERNATIONAL**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
TR—10 **XXXPLORE TV**—unedited "XXX"-rated adult movies & entertainment specials (fully encrypted/GI VIDEOCIPHER II)
TR—11 **THE OUTDOOR CHANNEL**—gold prospecting, hunting, fishing, vintage movies & historical programs (6.2/6.8)
TR—12 **THE SPACE CONNECTION**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
ADVANCED SATELLITE COMMUNICATIONS—live closed-circuit horse racing from Ohio state race tracks (digital video)
TR—13 **FOX TELEVISION NETWORK** (Pacific/Alaskan)(5.8 mono, 6.2/6.8 left-right stereo)
TR—14 **FOX TELEVISION NETWORK**—network affiliate programming feeds (5.8 mono, 6.2/6.8 left-right stereo)
TR—15 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
REMINGTON PRAK HORSE RACING—live closed-circuit horse racing from Remington Park race track (fully encrypted/S-A BMAC)
TR—16 **EUROTICA**—unedited "XXX"-rated adult movies & entertainment specials (fully encrypted/GI VIDEOCIPHER II)
TR—17 **FOX TELEVISION NETWORK** (Pacific/Alaskan)(5.8 mono/6.2/6.8 left-right stereo)
TR—18 **KELLY BROADCASTING**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
DISH NETWORK PROMO CHANNEL (6.2/6.8)
TR—19 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
NJT (National Jewish Television)—religious (6.2/6.8)
TR—20 **GLOBAL ACCESS TELECOM SERVICES**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
POST (Police Officer Standards & Training)—California state law enforcement training network (6.2/6.8)
TR—21 **ABC TV**—occasional transmissions: sports events, news & network feeds (6.2/6.8)

continued on next page

TR—22 **ABC TV**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
TR—23 **LA CADENA DEL MILAGRO**—Spanish language religious & family entertainment programming from Puerto Rico (6.2/6.8)
TR—24 **PANDAAMERICA**—shop-at-home service (6.2/6.8)

KU-BAND/54 MHZ TRANSPONDERS:

TR—1 **AT&T TRIDOM**—private business television network services (digital video/CLI SPECTRUM SAVER)
TR—2 **AT&T TRIDOM**—private business television network services (digital video/CLI SPECTRUM SAVER)
TR—3 **AT&T TRIDOM**—private business television network services (digital video/CLI SPECTRUM SAVER)
TR—4 **AT&T TRIDOM**—private business television network services (digital video/CLI SPECTRUM SAVER)
TR—5 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—6 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—7 **ALPHASTAR**—DTH DBS programming (digital video)

ALPHAPREVIEW CHANNEL
A&E
CARTOON NETWORK
CNN
CNN Headline News
CNNfn/CNNI
Comedy Central
CMTV
COURT TV
DISNEY CHANNEL (E)
DISNEY CHANNEL (W)
E! ENTERTAINMENT
THE FAMILY CHANNEL
HBO (E)
HBO (W)
HBO2 (E)
HBO2 (W)
HBO3 (E)
HBO CINEMAX (E)
HBO CINEMAX (W)
HBO CINEMAX 2
STARZ!
THE SUNDANCE CHANNEL
ENCORE
ENCORE 2-Love Stories
ENCORE 3-Westerns
ENCORE 4-Mystery
ENCORE 5-Action
ENCORE 6-True Stories & Drama
ENCORE 7-WAM
E! Entertainment
Asian Television Network
MTV
Nickelodeon
The Nashville Network
Sci-Fi Channel
Turner Classic Movies
Superstation TBS
TNT
TV Land
USA Network
VH-1
Classic Sports Network
PPV (10 channels)
C-SPAN
CNBC
The History Channel
The Learning Channel
The Weather Channel
Lifetime
NET-NewsTalk TV
MTV
Showtime
Showtime2
Flix
The Movie Channel (E)
The Movie Channel (W)
ABC
CBS
FOX
NBC
PBS
Sportschannel New York
Sportschannel Philadelphia
Sportschannel Ohio
Sportschannel Cincinnati
Sportschannel Chicago
Sportschannel Pacific
Midwest Sportschannel
Prime Sports Southwest
Prime Sports West
Prime Sports Network
Sunshine Network
HBL Sports Network
Home Team Sports
SportsSouth Network
Pro Am Sports System
Newsport
DMX (30 audio channels)

TR—8 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

continued on next page

KU-BAND/27 MHZ TRANSPONDERS:

TR—9 **ALPHASTAR**—DTH DBS programming-see TR-7
TR—10 **ALPHASTAR**—DTH DBS programming-see TR-7
TR—11 **ALPHASTAR**—DTH DBS programming-see TR-7
TR—12 **ALPHASTAR**—DTH DBS programming-see TR-7
TR—13 **ALPHASTAR**—DTH DBS programming-see TR-7
TR—14 **ALPHASTAR**—DTH DBS programming-see TR-7
TR—15A **DMX BUSINESS** (Digital Music Express)—60 music format services for commercial business applications (Comstream digital)

Subcarrier Audio Services on TELSTAR 402R

TR—11 **REN** (Radio Entertainment Network)—nostalgia radio programming format (5.8)
TR—18 **RADIO OTTO**—satellite-delivered pop music service from Italy (5.8)
ANTENNA SATELLITE RADIO—Greek music & variety and entertainment (7.82)

GE SPACENET 3 (C/Ku)(87°W)

Polarization: C-Band (36 Mhz)—Horizontal
C-Band (72 Mhz)—Vertical
Ku-Band (72 Mhz)—Horizontal

C-BAND/36 MHZ TRANSPONDERS:

TR—2(3) **WSBK-TV,** Boston—independent Boston superstation featuring Bruins hockey (fully encrypted/GI VIDEOCIPHER II)
TR—3(5) **UNIVISION**—Spanish language variety, entertainment & news programming (fully encrypted/GI VIDEOCIPHER II)
TR—5(9) **WPIX,** New York—highly rated independent superstation from the Big Apple (fully encrypted/GI VIDEOCIPHER II)
TR—6(11) **CNN** (Cable News Network)—incoming regional bureau newsfeeds (6.2/6.8)
CNNSI (Cable News Network/Sports Illustrated) (begins 12-9-96)
TR—7(13) **SPACECOM SYSTEMS**—subcarrier services only-see below
TR—8(15) **KTLA,** Los Angeles—independent Los Angeles superstation featuring Dodgers baseball and Kings hockey (6.8-Spanish language audio) (fully encrypted/GI VIDEOCIPHER II)
TR—9(17) **SPACECOM SYSTEMS**—subcarrier services only-see below
TR—10(19) **SPORTSOUTH**—regional southern sports network featuring Braves baseball and Hornets & Hawks basketball (fully encrypted/GI VIDEOCIPHER II)
TURNER NETWORK SERVICES—syndicated programming feeds (6.2/6.8)
TR—11(21) **PASS** (ProAm Sports)—regional Michigan-area sports network (fully encrypted/GI VIDEOCIPHER II)
TR—12(23) **HOME TEAM SPORTS**—Washington, DC/Maryland regional sports network (fully encrypted/GI VIDEOCIPHER II)

C-BAND/72 MHZ TRANSPONDERS:

TR—13U(4) **NEBRASKA ETV NETWORK**—Nebraska state PBS distribution channel (6.12/6.3 discrete stereo, 6.8 mono)
TR—16L(14) **CNN** (Cable News Network)—programming tba
TR—16U(16) **CNNfn** (CNN Financial News)—financial news programming (fully encrypted/GI VIDEOCIPHER II)
CNNI (Cable News Network International)—international news & features (evenings & Weekends) (fully encrypted/GI VIDEOCIPHER II)
TR—17L(18) **US SATELLITE**—occastional transmissions: sports events, news & network feeds (6.8)
SATELLITE CITY WIZARD CHANNEL—home satellite pay programming package shop-at-hone service (6.8)
TR—18U(24) **AMERICA ONE**—variety & entertainment programming for the LPTV industry (6.8)

KU-BAND/72 MHZ TRANSPONDERS:

TR—21 **OCCASIONAL TRANSMISSIONS**—sports events news & network feeds (6.2/6.8) (West Beam)
TR—22 **OCCASIONAL TRANSMISSIONS**—sports events news & network feeds (6.2/6.8) (East Beam)
TR—23 **OREGON ED NET**—Oregon state distance learning network (6.2/6.8) (West Beam) (upper & lower half-transponder format)
TR—24 **OCCASIONAL TRANSMISSIONS**—sports events news & network feeds (6.2/6.8) (East Beam)
SUNYSAT—State University of New York distance learning/teleconference network (6.2/6.8) (East Beam)(upper & lower half transponder format)

continued on next page

WESTSAT COMMUNICATIONS

Subcarrier Audio Services on SPACENET 3

TR—2(3) **WROL-AM,** Boston MA—religious, ethnic music format (6.2 mono)
TR—5(9) **CNN RADIO NETWORK**—all news radio feed (5.625 mono)

UNISTAR RADIO NETWORKS/UNISTAR COUNTRY—country & western music format (5.76/5.94 discrete stereo)
WWRL-AM, New York—American Urban Radio Network flagship (6.3/6.48 discrete stereo)
TALK AMERICA RADIO NETWORK—syndicated talkradio programming (6.8)
TR—7(13) **USA RADIO NETWORK** (.33)
VCY AMERICA 1—religious (.51)
VCY AMERICA 2—religious (.78)
SATELLITE MUSIC NETWORK/HOT AC—contemporary/modern rock format (1.05/1.59 discrete stereo)
FOCUS ON THE FAMILY-1—religious (1.23)
FOCUS ON THE FAMILY-2—religious (1.41)
ABC RADIO NETWORK SATELLITE SERVICES (1.59)
MOODY BROADCASTING NETWORK—religious (1.77/4.29 discrete stereo)
SATELLITE MUSIC NETWORK/STARDUST—traditional MOR music format (2.13/2.31 discrete stereo)
ABC RADIO NETWORK SATELLITE SERVICES (2.49)
ABC RADIO NETWORK SATELLITE SERVICES (2.67)
SATELLITE MUSIC NETWORK/PURE GOLD—golden oldies format (2.85/3.03 discrete stereo)
ABC RADIO NETWORK SATELLITE SERVICES (3.21)
ABC RADIO NETWORK SATELLITE SERVICES (3.39)
SATELLITE MUSIC NETWORK/COUNTRY COAST-TO-COAST—modern country format (3.57/3.75 discrete stereo)
SATELLITE MUSIC NETWORK/STARSTATION—adult contemporary format (3.93/4.11 discrete stereo)
AMBASSADOR RADIO—religious (4.47)
AMBASSADOR RADIO—religious (4.65)
INTERNATIONAL BROADCAST NETWORK (4.83 mono)
USA RADIO NETWORK (5.01/5.2 mono)
TR—8(15) **AMBASSADOR RADIO**—religious (5.94)
RADIO SEDEYE IRAN—Iranian/Persian cultural format (6.165)
AMBASSADOR RADIO—religious (6.48 mono)
TR—9(17) **CBN** (Christian Broadcasting Network)(.33)
WORLDWIDE NEWS (.51)
SKYLIGHT—religious (1.77/4.29 discrete stereo)
POP (Point of Purchase Radio Network) (.15/.645/.915/2.265/2.355/2.535/2.625/2.715/2.805/2.895/4.155)
WCSG/SONSHINE NETWORK—religious (1.275 mono)
MOODY BROADCASTING NETWORK—religious (3.0 MPEG digital audio)
ABC RADIO NETWORK SATELLITE SERVICES (3.21)
ABC RADIO NETWORK SATELLITE SERVICES (3.39)
SATELLITE MUSIC NETWORK/REAL COUNTRY—traditional country & western music format (3.57/3.75 discrete stereo)
IN TOUCH—religious (4.47 mono)
SALEM RADIO NETWORK—religious (4.65)
SALEM RADIO NETWORK—religious (5.01)
TR—13U(4) **KUCV-FM,** Lincoln, NE—NPR radio affiliate (5.76/5.94 discrete stereo)
RADIO TALKING BOOK NETWORK—Nebraska state newspaper & book reaing service for the sight-impaired (6.48 mono)
TR—17L(18) **INSTORE SATELLITE NETWORK**—background music for supermarket/department store chains (6.48)
TR—18U(24) **PSR** (Prime Sports Radio)—24-hr/day all-sports radio network (5.8)

continued on next page

SCPC Audio Services on SPACENET 3 (C-Band)

TR—7(13) **VCY AMERICA 1**—religious (52.10/55.74 stereo)
VCY AMERICA 2—religious (52.37/52.55 stereo)
GOOD NEWS RADIO NETWORK—religious (52.82/53.00 stereo)
SATELLITE MUSIC NETWORK/STARSTATION—adult contemporary format (53.45/53.72 stereo)
SATELLITE MUSIC NETWORK/COUNTRY COAST-TO-COAST—modern country format (53.90/54.17 stereo)
SATELLITE MUSIC NETWORK/STARDUST—traditional MOR music format (54.35/54.62 stereo)
LA RADIO CHRISTIANA—Hispanic contemporary Christian music & talk (55.50)
THE TOUCH—urban contemporary format (57.02/57.20 stereo)
SATELLITE MUSIC NETWORK/PURE GOLD—golden oldies format (57.74/57.92 stereo)
SATELLITE MUSIC NETWORK/HOT AC—contemporary/modern rock format (58.10/58.28 stereo)
SATELLITE MUSIC NETWORK/CLASSIC ROCK—classic rock format (58.55/58.73 stereo)

ATT TELSTAR 302 (85°W) inclined orbit satellite

Polarization: ODD: Vertical
EVEN: Horizontal

TR—1V(1) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—1H(2) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—2V(3) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
FLORIDA STATE LOTTERY-FANTASY 5 (6.2/6.8)
TR—2H(4) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
FLORIDA STATE LOTTERY-CASH 3 (6.2/6.8)
TR—3V(5) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—3H(6) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—4V(7) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—4H(8) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—5V(9) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—5H(10) **ABC TELEVISION NETWORK-NET 5**—regularly scheduled network programming (Pacific time zone feed (video encrypted/LEITCH) (6.2/6.8 stereo)
TR—6V(11) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—6H(12) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—7V(13) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—7H(14) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—8V(15) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—8H16) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—9V(17) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—9H(18) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—10V(19) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—10H(20) **ABC TELEVISION NETWORK-NET 5**—regularly scheduled network programming (Pacific time zone feed (video encrypted/LEITCH) (6.2/6.8 stereo)
TR—11V(21) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—11H(22) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—12V(23) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—12H(24) **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

GE K1 (Ku) (85°W)

Polarization: ODD—Horizontal
EVEN—Vertical

TR—2 thru 13, 15, 16: PRIMESTAR DBS DTH Services (digital video/GI DIGICIPHER)

1 HBO (E)
2 HBO2 (E)
3 HBO3
7 Cinemax (E)
8 Cinemax 2
13 TV Japan (English)
14 TV Japan (Japanese)
15 FUTURE SERVICE
17 FUTURE SERVICE
19 FUTURE SERVICE
27 STARZ!
31 ENCORE 3-Westerns
32 ENCORE 4-Mystery
33 ENCORE
34 The Disney Channel (E)
35 The Disney Channel (W)
40 Tne Golf Channel
47 C-SPAN
48 CNBC
49 The Weather Channel
50 CNN International/CNNfn
51 CNN
52 Headline News
55 Prevue Channel
56 FUTURE SERVICE
58 TNT
59 Turner Classic Movies
63 TBS Superstation
65 The Discovery Channel (E)
66 The Learning Channel
68 A&E
70 USA Network (E)
71 SCI-FI Channel
72 The Family Channel (E)
73 Cartoon Network
74 Nickelodeon/Nick-at-Nite
75 E! Entertainment
76 Lifetime (E)
77 The Nashville Network
78 Country Music Television
80 MTV
83 Faith & Values
84 QVC
111 NBC-WHDH (Boston)
114 ABC-WSB (Atlanta)
117 CBS-WUSA (Washington, DC)
120 FOX-KTVU, (Oakland-San Francisco)
124 PBS-WHYY, (Philadelphia)
131 ESPN
132 ESPN 2
137 Classic Sports Network
141 New England Sports Network
142 Madison Square Garden Network
143 Empire Sports Network
144 KBL Sports Network
145 Home Team Sports
146 SportSouth Network
147 Sunshine Network
148 Pro Am Sports System
149 FUTURE SERVICE
152 Prime Sports Network-Midwest
153 Prime Sports Network-Rocky Mountain
154 Prime Sports Southwest
155 Prime Sports Network-Intermountain West
156 Prime Sports Network-Northwest
157 FUTURE SERVICE
158 Prime Sports West
159 Midwest Sportschannel
181 HBO En Espanol
182 HBO 2 En Espanol
183 HBO 3 En Espanol
187 Cinemax Selecciones
188 Cinemax 2 Selecciones
190 Univision
201 Viewer's Choice
202 Request 1
203 Request 5
204 Hot Choice
205 Continuous Hits 1
206 Continuous Hits 2
207 Continuous Hits 3
208 Request 2
209 Request 3
210 Request 4
221 Playboy TV
301 Superaudio-Classic Hits
302 Superaudio-America's Country Favorites
303 Superaudio-Light 'n Lively Rock
304 Superaudio-Soft Sounds
305 Superaudio-Classical Collections
306 Superaudio-New Age of Jazz
311 DMX-Lite Jazz
312 DMX-Classic Rock
313 DMX-70's Oldies
314 DMX-Adult Contemporary
315 DMX-Hottest Hits
316 DMX-Modern Country
317 DMX-Traditional Blues
318 DMX-Salsa

GE K2 (Ku) (81°W)

Polarization: ODD—Horizontal
EVEN—Vertical

TR—1 **NBC TELEVISION NETWORK**—regularly scheduled network programming (Eastern)/incoming & outgoing newsfeeds (6.2/6.8 stereo)

TR—3 **NBC TELEVISION NETWORK**—regularly scheduled network programming (Pacific)/incoming & outgoing newsfeeds (6.2/6.8 stereo) (western spot beam)

TR—4 **CYCLESAT**—direct satellite commercial distribution service (6.2/6.8)

TR—5 **NBC TELEVISION NETWORK**—regularly scheduled network programming (incoming & outgoing newsfeeds (6.2/6.8 stereo)

TR—7 **NBC TELEVISION NETWORK-SKYCOM**—incoming & outgoing news/sports feeds and regular network programming (6.2/6.8 stereo)

TR—8 **CCC** (Chinese Communications Channel)—Nationalist Chinese news variety & entertainment programming (6.2/6.8)(video encrypted/TV-COM ORION)

TR—9 **NBC TELEVISION NETWORK-SKYCOM**—incoming & outgoing news/sports feeds and regular network programming (6.2/6.8 stereo)

TR—11 **NBC NEWS CHANNEL**—inbound/outbound remote newsfeeds (6.2/6.8)

TR—12 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

TR—13 **NBC NEWS CHANNEL**—inbound/outbound remote newsfeeds (6.2/6.8)

TR—14 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
OD-TV (Office Depot TV Network)—Office Depot private business television network (6.2/6.8)

TR—15 **NBC TELEVISION NETWORK-SKYCOM**—incoming & outgoing news/sports feeds and regular network programming (6.2/6.8 stereo)

TR—14 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

TR—16 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

Subcarrier Audio Services on K2

TR—8 **KAZN,** Pasadena, CA—Asian-American news, variety & talkradio format (6.2)

HUGHES BRASILSAT A1 (79°W)

inclined orbit satellite

Polarization: ODD—Horizontal
EVEN—Vertical

TR—1 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—2 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—3 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—4 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—5 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—6 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—7 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—8 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—9 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—10 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—11 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—12 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—13 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—14 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—15 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—16 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—17 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—18 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—19 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—20 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—21 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—22 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—23 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—24 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

HUGHES SBS 4 (Ku)(77°W) inclined orbit satellite

Polarization: All Horizontal

TR—1 **NBC DNE/SKYSWITCH COMS** (Data Channel)
TR—2 **NBC NEWS CHANNEL**—inbound/outbound remote newsfeeds (6.2/6.8)
TR—3 **NBC TELEVISION NETWORK**—network programming, sports and promo feeds (6.2/6.8)
TR—4 **NBC NEWS CHANNEL**—inbound/outbound remote newsfeeds (6.2/6.8)
NBC TELEVISION NETWORK—network programming, sports and promo feeds (6.2/6.8)
NBC NEWS ID CHANNEL (6.2/6.8)
TR—5 **NBC TELEVISION NETWORK**—network programming, sports and promo feeds (6.2/6.8)
TR—6 **NBC TELEVISION NETWORK**—network programming, sports and promo feeds (6.2/6.8)
TR—7 **NBC NEWS CHANNEL**—inbound/outbound remote newsfeeds (6.2/6.8)
TR—8 **NBC NEWS CHANNEL**—inbound/outbound remote newsfeeds (6.2/6.8)
TR—9 **NBC TELEVISION NETWORK**—network programming, sports and promo feeds (6.2/6.8)
TR—10 **NBC NEWS CHANNEL**—inbound/outbound remote newsfeeds (6.2/6.8)

COMSAT COMSTAR D4 (76°W) inclined orbit satellite

Polarization: ODD—Vertical
EVEN—Horizontal

NO VIDEO

HUGHES SBS 6 (Ku) (74°W)

Polarization: ODD—Horizontal
EVEN—Vertical

TR—1 **FAMILY NET**—religious & family-oriented variety programming (digital video/GI DIGICIPHER SCPC)
TR—2 **THE SPACE CONNECTION**—digital proprietary (ends 12-31-96)
TR—3 **MSNBC**—SNG newsgathering contract channel (6.2/6.8)
TR—4 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

PSTN POTOMAC (Postal Satellite Trainign Network)—U.S. Postal Service trainining network (6.2/6.8) (part-time encrypted/S-A BMAC)
MCET—Massachusetts Corporation for Educational Telecommunications regional distance learning network (6.2/6.8)
GMI ENGINEERING & MANAGEMENT INSTITUTE—engineering & management training courses (6.2/6.8)
MMIS II (Medicaid Management Information Systems)—Minnesota State medical assistance conference network (6.2/6.8)

TR—5 **MSNBC**—SNG newsgathering contract channel (6.2/6.8)
TR—6 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
HUD—U.S. Dept. of Housing & Urban Development private business television network (6.2/6.8)
HACNET (Hughes Aircraft Co)—internal teleconference network (part-time encrypted/LEITCH)
COOL TIMES TV—American Gas Cooling Center training & information network (6.2/6.8)

continued on next page

TR—7 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
HITN (Healthcare Infomatics Telecom Network)—accredited education distance learning network for healthcare professionals (6.2/6.8)
THE ATKINS NETWORK—Atkins Stores-field training/promotional private business television network (6.2/6.8)
TYLER BUSINESS TELEVISION—American Standard Co. private business television network (fully encrypted/LEITCH)
OLD DOMINION UNIVERSITY—distance learning telecourses (6.2/6.8)
UNIVERSITY OF WASHINGTON—language distance learning telecourses (6.2/6.8)
DILLARD'S SATELLITE NETWORK—Dillard's Stores private business television network (6.2/6.8)
EMSTAR—emergency medical technicians continuing education training courses (6.2/6.8)
UNIVERSITY OF MARYLAND—distance learning telecourses (6.2/6.8)

TR—8 **BAF COMMUNICATIONS**—sports events, news & network feeds (6.2/6.8)
HITN (Red Hispana de Television Publica)—distance learning telecourses for the Hispanic-American community (6.2)(upper & lower half transponder format)
INTERNET—Amway/Diamond Direct multilevel marketing sales, training & promotion (6.2/6.8)

TR—9 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
LOTUSVISION—Lotus Development private business television network (6.2/6.8)
WESTERN WASHINGTON UNIVERSITY—distance learning telecourses (6.2/6.8)
OKLAHOMA STATE UNIVERSITY—distance learning telecourses (6.2/6.8)
PYRAMID TECHNOLOGY—Pyramid Technology private business television network (6.2/6.8)
EENET—national/regional emergency services training network (6.2/6.8)

TR—10 **CONUS**—occasional transmissions: sports events, news & network feeds (5.76/6.2) (center full, lower & upper half transponder format)
CONUS WASHINGTON DIRECT (digital video/CLI MCPC) (upper half transponder format) (begins tba)
OMEN (Ohio Medical Education Network)—medical continuing education telecourses (6.2/6.8)

TR—11 **CONUS**—occasional transmissions: sports events, news & network feeds (5.76/6.2) (center full, lower & upper half transponder format)
PROJECT LEAP (Learn, Earn & Prosper)—Univ. of Mississippi distance learning telecourses (6.2/6.8)
RISING TIDE—GOP-TV Thursday evening Republican party issues/discussion (6.2/6.8)
SVS (Spanish via Satellite)—Spanish language telecourses from Univ.of Kansas (6.2/6.8)
GTE DIRECTORIES NET—GTE Directories Division private business television network (6.2/6.8)
TRANE SATELLITE NETWORK—Trane Co. private business television network (fully encrypted/LEITCH)
AETN (Arkansas Education Television Network)—Arkansas Education Forum - Second Wednesday Network (6.2/6.8)
UNIVERSITY OF OKLAHOMA—distance learning telecourses (6.2)(lower half transponder format)

TR—12 **CONUS**—occasional transmissions: sports events, news & network feeds (5.76/6.2)
ACTN (Andersen Communications & Training Network)—Arthur Andersen private business television network (fully encrypted/S-A BMAC)
TRANE SATELLITE NETWORK—Trane Co. private business television network (fully encrypted/LEITCH)
QUALITY SATELLITE NETWORK—business seminar instructional videoconferences (6.2/6.8)

TR—13 **CONUS**—occasional transmissions: sports events, news & network feeds (5.76/6.2)
APTV (Associated Press Television News)—daily custom news package service for tv stations (5.76) (upper half transponder format)
MEGABINGO—Indian gaming network of Oklahoma (5.76)(upper half transponder format)

TR—14 **GLOBAL ACCESS TELECOM SERVICES**—occasional transmissions;sports events, news & network feeds (6.2/6.8)
CHASEVISION—Chase Manhattan Bank private business television network (fully encrypted/S-A BMAC)
GTE VISNET (Visual Communications Network)—GTE divisional private business television network (6.2/6.8)

TR—15 **GLOBAL ACCESS TELECOM SERVICES**—occasional transmissions;sports events, news & network feeds (6.2/6.8)
WEST VIRGINIA STATE LOTTERY (6.2/6.8)
ETN (Educational Telecommunications Network)—Los Angeles County Schools internal teleconference network (6.2/6.8)
GE APPLIANCE—GE Appliance private business television network (fully encrypted S-A BMAC)
LESAT (Law Enforcement Satellite Network)—Tennessee state peace officers training network (6.2/6.8)

continued on next page

TR—16 **BAF COMMUNICATIONS**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
PSTN (Postal Satellite Training Network)—U.S. Postal Service training network (fully encrypted S-A BMAC)(upper & lower half transponder format)
NATIONAL GUARD BUREAU/MMB—ATC distance learning telecourses (6.8)
WESTERN MICHIGAN UNIVERSITY—distance learning telecourses (6.2/6.8)
TR—17 **GLOBAL ACCESS TELECOM SERVICES**—occasional transmissions;sports events, news & network feeds (6.2/6.8)
UNIVERSITY OF VERMONT—distance learning telecourses (6.2/6.8)
CENTERNET—Association of Academic Health Centers healthcare professionals interactive seminars network (6.2/6.8)
NEW MEXICO STATE UNIVERSITY—WERC/Waste Management accredited courses (6.2/6.8)
APHIN (Alabama Public Health TV Network)—state public health advisory & training network (6.2/6.8)
MISSISSIPPI STATE UNIVERSITY—distance learning telecourses (6.2/6.8)
TR—18 **CNN** (Cable News Network)—SNG newsgathering contract channel (6.2/6.8)
NEWS IN MOTION—daily news graphics package service (6.2/6.8
TR—19 **CNN** (Cable News Network)—SNG newsgathering contract channel (6.2/6.8)

HUGHES GALAXY 6 (74°W)

Polarization: ODD—Horizontal
EVEN—Vertical

TR—1 **TBS** (Tokyo Broadcasting System)—New York-to-Tokyo newsfeed circuit (6.2/6.8)
TR—2 **GLOBAL ACCESS TELECOM SERVICES**—occasional transmissions: sports events, news & network feeds 6.2/6.8)
FORT ERIE HORSE RACING—live closed circuit horse racing from Fort Erie race track (6.2/6.8)
SOUTH CAROLINA DEPT OF EDUCATION—distance learning telecourses (6.2/6.8)
TR—3 **HUGHES COMMUNICATIONS**—SCPC audio services only - see below
TR—4 **AUTOTOTE**—live closed-circuit horse racing (fully encrypted/S-A BMAC)
MOHAWK HARNESS RACING—live closed-circuit harness racing from Mohawk race track (6.2/6.8)
VSEN (Virginia State Education Network)—Virginia State public schools distance learning telecourses (6.2/6.8)
TR—5 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—6 **NHK TELEVISION NETWORK**—Tokyo-to-U.S. network feed circuit (6.2)
TR—7 **NET** (Political NewsTalk Network)—interactive conservative public affairs network (6.2/6.8)
TR—8 **WORLDWIDE BROADCASTING**—live closed-circuit horse racing (digital video/S-A SCPC)
TR—9 **MUCH MUSIC**—pop/rock videos (fully encrypted/GI VIDEOCIPHER II)
TR—10 **ANA** (Arab Network of America)—live Arabic language news; international Arab variety & entertainment programming (6.2/6.8)
TR—11 **KEYSTONE COMMUNICATIONS**—occasional transmissions; sports events, news & network feeds (6.2/6.8)
WEST VIRGINIA EDUCATIONAL NETWORK—graduate/post graduate distance learning telecourses (6.2/6.8)
FOX NEWS SERVICE (6.2/6.8)
TR—12 **TV ASIA**—variety & entertainment programming from the Asian subcontinent (digital video/S-A SCPC)
ROBERTS TV INTERNATIONAL—live closed-circuit horse racing (digital video/1-3 channels SCPC)
TR—13 **RTP INTERNATIONAL** (Radiotelevisao Portuguesa)—North American distribution service of Portugal's national network channel (6.8)
TR—14 **CORNERSTONE TELEVISON NETWORK**—religious (6.2/6.8)
TR—15 **MIDWEST SPORTCHANNEL**—Minnesota regional sportsservice featuring Twins baseball, Timberwolves hockey, Univ. of Minnesota sports (fully encrypted/GI VIDEOCIPHER II)
TR—16 **AUTOTOTE**—live closed-circuit horse racing (digital video/S-A SCPC)
CBUSAT (Caribbean Broadcasting Union)—variety & entertainment programming for Caribbean island

continued on next page

countires from Barbados (fully encrypted/S-A BMAC)

TR—17 **KEYSTONE COMMUNICATIONS**—occasional transmissions; sports events, news & network feeds (6.2/6.8)

HOOSIER LOTTERY (6.2/6.8)
MSG 2 (Madison Square Garden Cable Network)—live sports programming overflow network (6.2/6.8)

TR—18 **DOME PRODUCTIONS**—occasional transmissions: sports events, news & network feeds (6.2/6.8)
WOODBINE HORSE RACING—live closed-circuit horse racing from Woodbine race trace (6.2/6.8)
CUSTOMS SERVICE BROADCASTING SYSTEM—U.S. Customs Service private television network (6.2/6.8)

TR—19 **THE UNIVERSITY NETWORK**—religious programming with Dr. Eugene Scott (6.2/6.8)
TR—20 **CNN HEADLINE NEWS**—CNN newsbrief headline service (fully encrypted/GI VIDEOCIPHER II)
TR—21 **AUTOTOTE**—live closed-circuit horse racing (fully encrypted/S-A BMAC, LEITCH)
GARDEN STATE HORSE RACING—live closed-circuit horse racing from Garden State race track (fully encrypted/LEITCH)
FLAMBORO DOWNS HARNESS RACING—live closed circuit harness racing from Flamboro Downs race track (6.2/6.8)
TR—22 **AUTOTOTE**—live closed-circuit horse racing ((digital video/GI DIGICIPHER SCPC)
TR—23 **WORSHIP**—inspirational music videos and interactive church services (6.2/7.5 stereo,6.8 mono)
TR—24 **AUTOTOTE**—live closed-circuit horse racing (digital video/GI DIGICIPHER SCPC)
VSEN (Virginia State Education Network)—Virginia State public schools distance learning telecourses (6.2/6.8)

Subcarrier Audio Services on GALAXY 6

TR—10 **ARAB RADIO NETWORK**—talkradio & news information format (5.8)
TR—14 **AMERICAN FREEDOM NETWORK**—call-in talkshow format (5.8)
TR—15 **WCCO-AM,** Minneapolis-St Paul, MN—talkradio & news information format (6.2)
TR—23 **RADIO LIBERTY**—live call-in talkshow format (8.1)

SCPC Audio Services on GALAXY 6

TR—3 **KIRO-AM,** Seattle, WA—talk, news radio format; Mariners, Seahawks flagship (54.40)
SPORTS BYLINE USA—evening sportstalk radio format; KQED-FM, San Francisco, CA—NPR affiliate (54.60)
IDB OCCASIONAL AUDIO (54.80
TALK AMERICA RADIO NETWORK—nationwide call-in talkradio format (55.40)
IDB OCCASIONAL AUDIO (55.80)
IDB OCCASIONAL AUDIO/WTMJ CONFLICT NETWORK (56.20)
OCCASIONAL AUDIO (56.60)
MRN (Motor Racing Network) (56.80)
AGRINET (57.00)
ILLINOIS NEWS NETWORK/UNIV. OF ILLINOIS SPORTS (57.20)
IDB OCCASIONAL AUDIO (58.30)
WBAL-AM, Baltimore, MD—all-news radio format (59.20)
IDB OCCASIONAL AUDIO (59.40)
IDB OCCASIONAL AUDIO (60.80)
RAY COMMUNICATIONS (61.00)
WGN-AM, Chicago, IL—news, talkradio format, Cubs flagship; Bears flagship (61.70)
GREAT LAKES MEDIA GROUP (62.00)
SUNSTAR RADIO NETWORK—occasional audio; Gators sports (62.40)
WTMJ-AM, Milwaukee, WI—news, talkradio format; Brewers, Packers, Bucs flagship (62.80)
TRIBUNE RADIO NETWORK (Northeast) (66.60)
WGN NEWS NETWORK (66.80)
OCCASIONAL AUDIO (67.00)

continued on next page

WGN-AM, Chicago, IL—news, talk radio format, WGN Truckers Network; Cubs flagship; Bears flagship (67.30)
XPRS-AM, Los Angeles, CA—Spanish language variety & entertainment (68.40)
IDB OCCASIONAL AUDIO/KIRO CONFLICT NETWORK (68.60)
IDB OCCASIONAL AUDIO (69.10)
LOS ANGELES DODGERS RADIO NETWORK (English)(69.40)
LOS ANGELES DODGERS RADIO NETWORK (Spanish)(69.60)
IDB OCCASIONAL AUDIO (70.00)
IDB OCCASIONAL AUDIO (70.80)
OCCASIONAL AUDIO (71.30)
IDB OCCASIONAL AUDIO (71.50)
IDB OCCASIONAL AUDIO (71.80)
IDB OCCASIONAL AUDIO (72.00)
KWKW-AM, Los Angeles, CA—La Mexicana format; Dodgers (Spanish) flagship (72.50)
WJR CONFLICT NETWORK (72.90)
GREAT LAKES RADIO NETWORK (73.30)
WJR-AM, Detroit, MI—news, talk radio format; Tigers, Red Wings flagship; Univ. Michigan sports (73.50)
ILLINOIS RADIO NETWORK/CHICAGO BLACKHAWKS RADIO NETWORK (73.70)
IDB OCCASIONAL AUDIO (74.00)
WMAQ-AM, Chicago, IL—news, talk radio format; Bulls, White Sox flagship (74.20)
IDB OCCASIONAL AUDIO (74.70)
PEOPLE'S RADIO NETWORK—talk radio & informational programming (74.90)
OCCASIONAL AUDIO (75.20)
IDB OCCASIONAL AUDIO (75.40)
OCCASIONAL AUDIO (75.60)
KMPC-AM, Los Angeles, CA—sports, talkradio format; Clippers, Angels, Rams flagship; UCLA sports (75.80)
CHICAGO WHITE SOX RADIO NETWORK (76.00)
KJR-AM, Seattle, WA—sports talkradio format; Sonics flagship (76.20)
IDB OCCASIONAL AUDIO (76.40)
OAKLAND A'S RADIO NETWORK (76.60)
OCCASIONAL AUDIO (76.80)
OCCASIONAL AUDIO (82.40)
OCCASIONAL AUDIO (83.00)
IDB OCCASIONAL AUDIO (82.70)
AGRINET/RAY COMMUNICATIONS—regional/national agricultural news & sports reports (84.60)
IDB OCCASIONAL AUDIO (85.10)
IDB OCCASIONAL AUDIO (85.70)
NORTHWEST DIRECT NETWORK (85.90)

COMSAT SBS 2 (Ku)(71°W)

inclined orbit satellite

Polarization: All Horizontal

TR—1 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—2 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—3 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—4 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—5 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—6 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—7 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—8 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—9 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—10 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

GE SATCOM SN2 (C/Ku)(69°W)

Polarization: C-Band (36 Mhz)—Horizontal
C-Band (72 Mhz)—Vertical
Ku-Band (72 Mhz)—Horizontal

C-BAND/36 MHZ TRANSPONDERS:

TR—1(1) **SPORTSCHANNEL NEW YORK**—New York regional sports network (fully encrypted/GI VIDEOCIPHER II)
TR—2(3) **USIA WORLD NET** (United States Information Agency)—USIA outbound feed circuit/Voice of America (6.8)
TR—3(5) **NASA CONTRACT CHANNEL**—direct orbit video relay channel (fully encrypted/LEITCH)
TR—4(7) **BROADCAST MEDIA SATELLITE**— occasional transmissions: sports events, news & network feeds (6.2/6.8)
LA CARPA—Spanish language religious programming from Puerto Rico (6.2/6.8)
TR—5(9) **NASA TELEVISION**—live NASA mission events & NASA informational programming (6.2/6.8)
TR—6(11) **SPORTSCHANNEL PHILADELPHIA**—regional Philadelphia area sports network featuring Phillies baseball, Sixers basketball & Flyers hockey (fully encrypted/GI VIDEOCIPHER II)
TR—8(15) **HERO COMMUNICATIONS**— occasional transmissions: sports events, news & network feeds
TR—11(21) **SPORTSCHANNEL NEW ENGLAND**—Northeast regiona sports network featuring Celtics basketball (fully encrypted/GI VIDEOCIPHER II)
TR—12(23) **NHK TELEVISION NETWORK**—New York-to-Tokyo newsfeed circuit (6.2/6.8)

C-BAND/72 MHZ TRANSPONDERS:

TR—13L(2) **GEMS TV**—variety & entertainment programming for Hispanic women (digital video/GI DIGICIPHER SCPC)
TR—13U(4) **HTV** (Hip-Spanic)—Caribean-Hispanic music videos (fully encrypted/GI VIDEOCIPHER II)
TR—17U(20) **ARMED FORCES SATELLITE NETWORK**—various network & independent programming (fully encrypted/S-A BMAC)
TR—18L(22) **RAINBOW COMMUNICATIONS**—occasional transmissions: sports events, news & network feeds (fully encrypted/GI VIDEOCIPHER II)
SPORTSCHANNEL NEW YORK PLUS—overflow live sports programming channel

KU-BAND/72 MHZ TRANSPONDERS:

TR—20 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)
TR—21 **TV ASAHI**—New York-to-Tokyo newsfeed backhaul circuit (6.2/6.8) (video encrypted/LEITCH) (upper half transponder)
CNNI NEWSOURCE—CNN International affiliate newsfeeds (6.2/6.8)
TR—23 **KET** (Kentucky Educational Television)—educational courses teletraining (6.2/6.8) (upper & lower half transponder format)
TR—24 **OCCASIONAL TRANSMISSIONS**—sports events, news & network feeds (6.2/6.8)

Subcarrier Audio Services on SN2

TR—13U(4) **WAXY-AM**, South Miami, FL—nostalgia, big band music format (7.4)
WCMQ-AM, Miami, FL—MOR/AOR music format: Marlins flagship (Spanish)(7.74/7.92 stereo)
TR—2(3) **VOICE OF AMERICA** (5.94/6.12/7.335/7.425/7.515/7.605)
TR—6(11) **RADIO TROPICAL**—French language variety programming for Caribbean Islands (7.6)
TR—8(15) **WLVE-FM**, Miami Beach, FL—smooth jazz format (6.2/6.8)
TR—11(21) **CHRISTIAN MUSIC RADIO**—Christian contemporary music format (7.6)
TR—17U(20) **AFRTS RADIO** (7.4)

SCPC Audio Services on SN2

TR—15U(12) **RADIO MARTI**—VOA/USIA service to Cuba (77.70)

NORTH AMERICAN Ku-BAND SATELLITE FREQUENCY/TRANSPONDER CONVERSION TABLE

SBS 2, 4 & 5 Transponder	Uplink Frequency in Mhz	Downlink Frequency in Mhz
1 (H)	14025	11725
2 (H)	14074	11774
3 (H)	14123	11823
4 (H)	14172	11872
5 (H)	14221	11921
6 (H)	14270	11970
7 (H)	14319	12019
8 (H)	14368	12068
9 (H)	14417	12117
10 (H)	14466	12166
***11 (V)	14062	11762
***12 (V)	14198	11898
***13 (V)	14294	11994
***14 (V)	14441	12141

*** SBS5 single channel video only.

TELSTAR 401 & 402R Transponder	Uplink Frequency in Mhz	Downlink Frequency in Mhz
1(V)	14030	11730
2(H)	14043	11743
3(V)	14090	11790*
4(H)	14103	11803*
5(V)	14150	11850*
6(H)	14163	11863*
7(V)	14210	11910*
8(H)	14223	11923*
9A(L)(V)	14256	11956*
9(C)(V)	14271	11971*
9B(U)(V)	14286	11986*
10A(L)(H)	14269	11969
10(C)(H)	14284	11984
10B(U)(H)	14299	11999
11A(L)(V)	14318	12018*
11(C)(V)	14333	12033*
11B(U)(V)	14348	12048
12A(L)(H)	14331	12031
12(C)(H)	14346	12046
12B(U)(H)	14361	12061
13A(L)(V)	14380	12080
13(C)(V)	14395	12095
13B(U)(V)	14410	12110
14A(L)(H)	14393	12093
14(C)(H)	14408	12108
14B(U)(H)	14423	12123
15A(L)(V)	14442	12142
15(C)(V)	14457	12157*
15B(U)(V)	14472	12172
16A(L)(H)	14455	12155
16(C)(H)	14470	12170*
16B(U)(H)	14485	12185

SBS 6 Transponder	Uplink Frequency in Mhz	Downlink Frequency in Mhz
1(H)	14025.0	11725.0
2(V)	14049.5	11749.5
3(H)	14074.0	11774.0
4(V)	14098.5	11798.5
5(H)	14123.0	11823.0
6(V)	14147.5	11847.5
7(H)	14172.0	11872.0
8(V)	14196.5	11896.5
9(H)	14221.0	11921.0
10(V)	14245.5	11945.5
11(H)	14270.0	11970.0
12(V)	14294.5	11994.5
13(H)	14319.0	12019.0
14(V)	14343.5	12043.5
15(H)	14368.0	12068.0
16(V)	14392.5	12092.5
17(H)	14420.0	12120.0
18(V)	14441.5	12141.5
19(H)	14466.0	12166.0

Morelos 2 Transponder	Uplink Frequency in Mhz	Downlink Frequency in Mhz
1K(H)	14064	11764
2K(H)	14188	11888
3K(H)	14312	12012
4K(H)	14436	12136

Solidaridad 1 & 2 Transponder	Uplink Frequency in Mhz	Downlink Frequency in Mhz
1(H)	14030	11730
2(H)	14091	11791
3(H)	14152	11852
4(H)	14213	11913
5(H)	14274	11974
6(H)	14335	12035
7(H)	14396	12096
8(H)	14457	12157
9(V)	14043	11743
10(V)	14104	11804
11(V)	14165	11865
12(V)	14226	11926
13V	14287	11987
14(V)	14348	12048
15(V)	14409	12109
16(V)	14470	12170

Anik C3, E1 & E2 Transponder	Uplink Frequency in Mhz	Downlink Frequency in Mhz
T1(V)	14017	11717
T2(V)	14043	11743
T3(V)	14078	11778
T4(V)	14104	11804
T5(V)	14139	11839
T6(V)	14165	11865
T7(V)	14200	11900
T8(V)	14226	11926
T9(V)	14261	11961
T10(V)	14287	11987
T11(V)	14322	12022
T12(V)	14348	12048
T13(V)	14383	12083
T14(V)	14409	12109
T15(V)	14444	12144
T16(V)	14470	12170
T17(H)	14030	11730
T18(H)	14056	11756
T19(H)	14091	11791
T20(H)	14117	11817
T21(H)	14152	11852
T22(H)	14178	11878
T23(H)	14213	11913
T24(H)	14239	11939
T25(H)	14274	11974
T26(H)	14300	12000
T27(H)	14335	12035
T28(H)	14361	12061
T29(H)	14396	12096
T30(H)	14422	12122
T31(H)	14457	12157
T32(H)	14483	12183

Spacenet 3 & 4 SN2 Transponder	Uplink Frequency in Mhz	Downlink Frequency in Mhz
19(H)	14040	11740
20(H)	14120	11820
21(H)	14200	11900
22(H)	14280	11980
23(H)	14360	12060
24(H)	14440	12140

**NOTE: These TELSTAR 401 Ku-Band downlink frequencies were offset to prevent possible interference to adjacent satellite SBS 6, formally located at 95°W. Please refer to the TELSTAR 401 listings on pages 29 & 30 for these new offset frequencies.*

Downlink polarization for each transponder denoted in parenthesis.

WESTSAT COMMUNICATIONS

NORTH AMERICAN Ku-BAND SATELLITE FREQUENCY/TRANSPONDER CONVERSION TABLE

GStar 1,2,3 & 4 Transponder	Uplink Frequency in Mhz	Downlink Frequency in Mhz
1(H)	14030	11730
2(H)	14091	11791
3(H)	14152	11852
4(H)	14213	11913
5(H)	14274	11974
6(H)	14335	12035
7(H)	14396	12096
8(H)	14457	12157
9(V)	14044	11744
10(V)	14105	11805
11(V)	14166	11866
12(V)	14227	11927
13(V)	14288	11988
14(V)	14349	12049
15(V)	14410	12110
16(V)	14471	12171

GE K1 & K2 Transponder	Uplink Frequency in Mhz	Downlink Frequency in Mhz
1(H)	14029.0	11729.0
2(V)	14058.5	11758.5
3(H)	14088.0	11788.0
4(V)	14117.5	11817.5
5(H)	14147.0	11847.0
6(V)	14176.5	11876.5
7(H)	14206.0	11906.0
8(V)	14235.5	11935.5
9(H)	14265.0	11965.0
10(V)	14294.5	11994.5
11(H)	14324.0	12024.0
12(V)	14353.5	12053.5
13(H)	14383.0	12083.0
14(V)	14412.5	12112.5
15(H)	14442.0	12142.0
16(V)	14471.5	12171.5

Galaxy 7 (K7) Transponder	Uplink Frequency in Mhz	Downlink Frequency in Mhz
1(V)(1)	14020	11720
2(H)	14050	11750
3(V)	14050	11750
4(V)(4)	14080	11780
5(H)	14110	11810
6(V)(6)	14110	11810
7(V)(7)	14140	11840
8(H)	14170	11870
9(V)(9)	14170	11870
10(V)(10)	14200	11900
11U(H)(61)	14245	11945
12(V)(12)	14230	11930
13V(13)	14260	11960
14L(H)(54)*	14276	11976
14U(H)(64)*	14305	12005
15(V)(15)	14291	11991
16(V)(16)	14320	12020
17L(H)	14335	12035
17U(H)	14365	12065
18(V)	14350	12050
19(V)(19)	14380	12080
20(H)	14410	12110
21(V)(21)	14410	12110
22(V)(22)	14440	12140
23(H)	14470	12170
24(V)(24)	14470	12170

Number in parens next to GALAXY 4 & 7 transponders refer to HUGHES-designated Video Timesharing Service channels allocated for video only.

GE-1 Transponder	Uplink Frequency in Mhz	Downlink Frequency in Mhz
1(H)	14020	11720
2(V)	14040	11740
3(H)	14060	11760
4(V)	14080	11780
5(H)	14100	11800
6(V)	14120	11820
7(H)	14140	11840
8(V)	14160	11860
9(H)	14180	11880
10(V)	14200	11900
11(H)	14220	11920
12(V)	14240	11940
13(H)	14260	11960
14(V)	14280	11980
15(H)	14300	12000
16(V)	14320	12020
17(H)	14340	12040
18(V)	14360	12060
19(H)	14380	12080
20(V)	14400	12100
21(H)	14420	12120
22(V)	14440	12140
23(H)	14460	12160
24(V)	14480	12180

Galaxy 4 (K4) Transponder	Uplink Frequency in Mhz	Downlink Frequency in Mhz
1(H)	14020	11720
2(V)	14050	11750
3(H)	14051	11751
4(H)	14080	11780
5L(V)	14095	11795
5U(V)	14125	11825
6(H)	14110	11810
7(H)	14140	11840
8L(V)	14155	11855
8U(V)	14185	11885
9(H)	14170	11870
10(H)	14200	11900
11L(V)(51)*	14215	11915
11U(V)(61)*	14245	11945
12(H)	14230	11930
13(H)	14260	11960
14L(V)(54)*	14275	11975
14U(V)(64)*	14305	12005
15(H)	14290	11990
16(H)	14320	12020
17L(V)	14335	12035
17C(V)	14356	12056
17U(V)	14365	12065
18(H)	14347	12047
19(H)	14380	12080
20L(V)	14395	12095
20U(V)	14425	12125
21(H)	14410	12110
22(H)	14440	12140
23L(V)	14455	12155
23C(V)	14464	12164
23U(V)	14485	12185
24(H)	14473	12173

Downlink polarization for each transponder denoted in parenthesis.

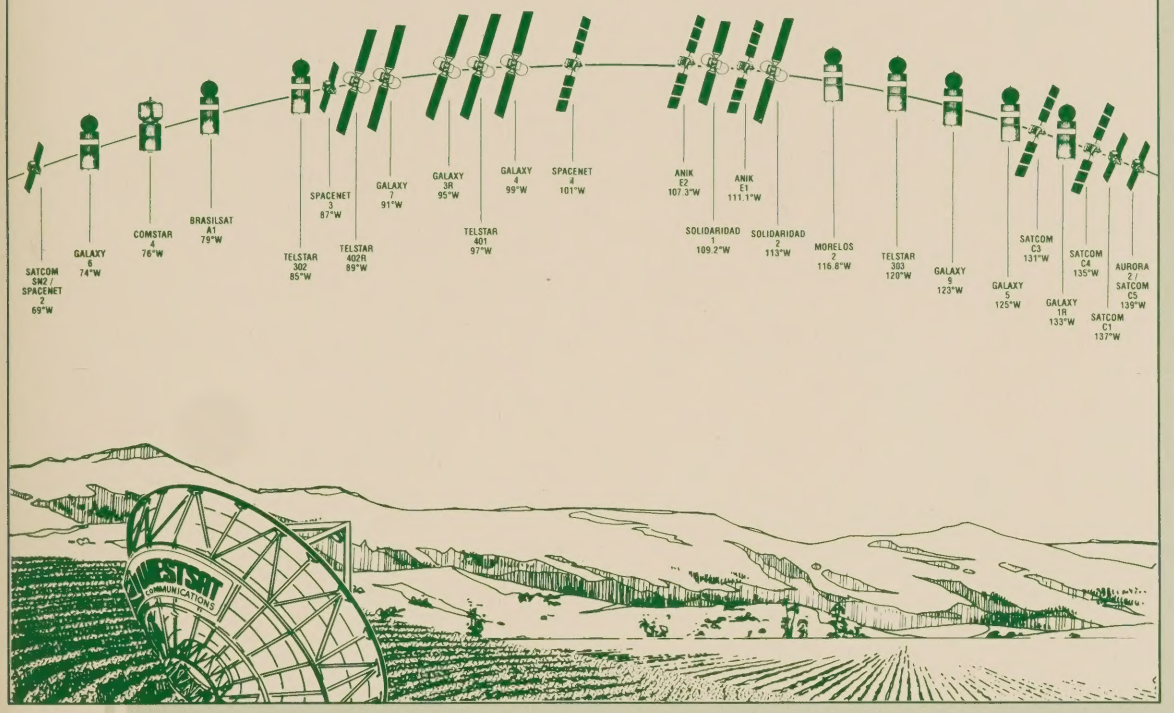
WESTSAT COMMUNICATIONS

NORTH AMERICAN C-BAND SATELLITE FREQUENCY/TRANSPONDER CONVERSION TABLE

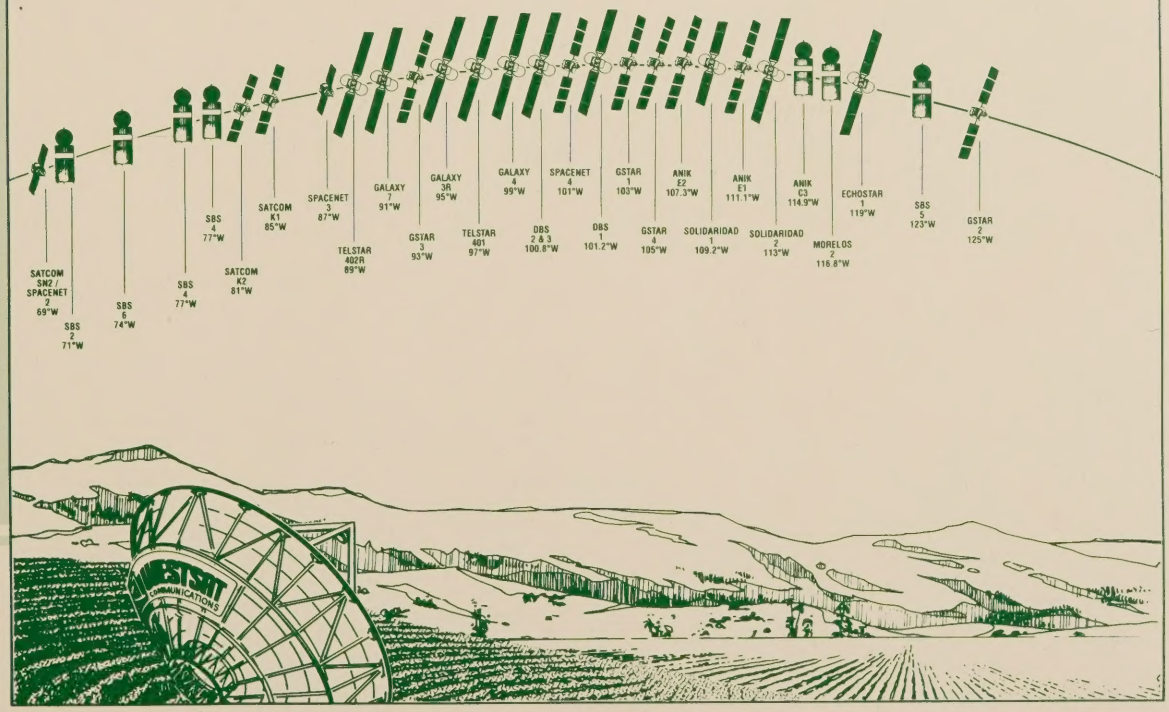
Channel or Dial Number	Uplink Frequency in MHz	Downlink Frequency in MHz	Satcom C3, C4 C5/Aurora 2 Galaxy 9 Telstar 401, 402R	Telstar 302 &303 Comstar 4	Anik E1 & E2	GE-1 Galaxy 1R, 3R,4,5,6 & 7 Satcom C1 Brasilsat A1	Spacenet 3 SN2	Spacenet 4	Morelos 2	Solidaridad 1 & 2	Channel or Dial Number
1	5945	3720	1(V)	1V (V)	1A (H)	1 (H)	1 (H)	1(V)	1W/L(H)*	1N(V)	1
2	5965	3740	2(H)	1H (H)	1B (V)	2 (V)	13L (V)*	7(H)	1N(V)	1W/L(H)*	2
3	5985	3760	3(V)	2V (V)	2A (H)	3 (H)	2 (H)	2(V)	1W/U(H)*	2N(V)	3
4	6005	3780	4(H)	2H (H)	2B (V)	4 (V)	13U (V)*	8(H)	2N(V)	1W/U(H)*	4
5	6025	3800	5(V)	3V (V)	3A (H)	5 (H)	3 (H)	3(V)	2W/L(H)*	3N(V)	5
6	6045	3820	6(H)	3H (H)	3B (V)	6 (V)	14L (V)*	9(H)	3N(V)	2W/L(H)*	6
7	6065	3840	7(V)	4V (V)	4A (H)	7 (H)	4 (H)	4(V)	2W/U(H)*	4N(V)	7
8	6085	3860	8(H)	4H (H)	4B (V)	8 (V)	14U (V)*	10(H)	4N(V)	2W/U(H)*	8
9	6105	3880	9(V)	5V (V)	5A (H)	9 (H)	5 (H)	5(V)	3W/L(H)*	5N(V)	9
10	6125	3900	10(H)	5H (H)	5B (V)	10 (V)	15L (V)*	11(H)	5N(V)	3W/L(H)*	10
11	6145	3920	11(V)	6V (V)	6A (H)	11 (H)	6 (H)	6(V)	3W/U(H)*	6N(V)	11
12	6165	3940	12(H)	6H (H)	6B (V)	12 (V)	15U (V)*	12(H)	6N(V)	3W/U(H)*	12
13	6185	3960	13(V)	7V (V)	7A (H)	13 (H)	7 (H)	13L(V)	4W/L(H)*	7N(V)	13
14	6205	3980	14(H)	7H (H)	7B (V)	14 (V)	16L (V)*	16L(H)*	7N(V)	4W/L(H)*	14
15	6225	4000	15(V)	8V (V)	8A (H)	15 (H)	8 (H)	13U(V)*	4W/U(H)*	8N(V)	15
16	6245	4020	16(H)	8H (H)	8B (V)	16 (V)	16U (V)*	16U(H)*	8N(V)	4W/U(H)*	16
17	6265	4040	17(V)	9V (V)	9A (H)	17 (H)	9 (H)	14L(V)*	5W/L(H)*	9N(V)	17
18	6285	4060	18(H)	9H (H)	9B (V)	18 (V)	17L (V)*	17L(H)*	9N(V)	5W/L(H)*	18
19	6305	4080	19(V)	10V (V)	10A (H)	19 (H)	10 (H)	14U(V)*	5W/U(H)*	10N(V)	19
20	6325	4100	20(H)	10H (H)	10B (V)	20 (V)	17U (V)*	17U(H)*	10N(V)	5W/U(H)*	20
21	6345	4120	21(V)	11V (V)	11A (H)	21 (H)	11 (H)	15L(V)*	6W/L(H)*	11N(V)	21
22	6365	4140	22(H)	11H (H)	11B (V)	22 (V)	18L (V)*	18L(H)*	11N(V)	6W/L(H)*	22
23	6385	4160	23(V)	12V (V)	12A (H)	23 (H)	12 (H)	15U(V)*	6W/U(H)*	12N(V)	23
24	6405	4180	24(H)	12H (H)	12B (V)	24 (V)	18U (V)*	18U(H)*	12N(V)	6W/U(H)*	24

*72 Mhz band width transponders.

Charting the Satellites / C Band



Charting the Satellites / Ku Band



Charting The Satellites / C & Ku Band